# NAVAL POSTGRADUATE SCHOOL MONTEREY, CALIFORNIA



### **THESIS**

EFFECTS OF THE WAR ON DRUGS ON OFFICIAL CORRUPTION IN COLOMBIA

by

Hernando Wills Vélez December, 1995

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While the United States believes that the main problem is on the supply side, Colombian people and officials think that the problem is more demand oriented. Results show that official corruption in Colombia is linearly correlated with action against illegal drug trafficking. If the level of action against illegal drugs increases, official corruption increases but not in the same proportion. Regression analysis revealed that 28.2 percent of the variation on official corrupton is explained by variation in the action against illegal drugs. The analysis also led to the conclusion that the Colombian government is acting against the problem, and that drug-related corruption is not the only kind of official corruption in the country. Recommendations for further research are included.

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## EFFECTS OF THE WAR ON DRUGS ON OFFICIAL CORRUPTION IN COLOMBIA

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Submitted in partial fulfillment of the requirements for the degree of

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#### **ABSTRACT**

This thesis analyzes the relationship between the war on drugs and official corruption in Colombia. Two variables are used in the study. The first one is official corruption in Colombia, which is measured using the number of articles on official corruption published by Colombia's newspaper El Tiempo and The Economist magazine. The second variable is action against illegal drugs. This variable is measured by a combination of the Colombian National Police budget and the level of commitment to act against the problem.

To understand what war on drugs is, a chapter describing drug policies of both the United States and Colombia is included. On policy issues, each country has its own perspective of the problem. While the United States believes that the main problem is on the supply side, Colombian people and officials think that the problem is more demand oriented.

Results show that official corruption in Colombia is linearly correlated with action against illegal drug trafficking. If the level of action against illegal drugs increases, official corruption increases but not in the same proportion. Regression analysis revealed that 28.2 percent of the variation on official corrupton is explained by variation in the action against illegal drugs. The analysis also led to the conclusion that the Colombian government is acting against the problem, and that drug-related corruption is not the only kind of official corruption in the country. Recommendations for further research are included.

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#### I. INTRODUCTION

The purpose of this thesis is to determine if a relationship between the war against illegal drug trafficking and the level of official corruption in Colombia exists. Most studies related to the drug problem focus on production quantities of drugs, the quantity of illegal drugs smuggled into the United States, the problem of domestic consumption, and the economic impact in both consuming and producing countries. This study addresses one of the many social effects that the war on illegal drugs is having in Colombian society: official corruption.

#### A. BACKGROUND

Illegal drug trafficking is recognized by the international community as one of the most significant problems of modern society. Because of this, a variety of methods to attack the problem have been developed. Methods such as criminalization of trafficking and use, decriminalization, legalization, demand reduction, supply reduction, and several combinations of these are widely used throughout the world. So far the most popular, and the one currently in place, is the criminalization of illegal trafficking and use combined with the reduction of supply by the use of force. This approach, as all others, has unavoidable consequences both in the United States and in the producing countries. One of these consequences is, without a doubt, the spread of corrupt practices by government officials in response to bribery and intimidation by wealthy drug dealers attempting to ensure that their business runs smoothly.

To establish the relationship between the war on drugs and the level of official corruption in Colombia requires the development of a method to measure both variables. Once that information is available, analytical techniques can be used to find their level of correlation.

The author wants to clarify that when the words "producing countries" is used, it does not mean that the production is legal or supported by the government.

The results will help policymakers better understand the possible consequences of the decisions they make, and on policies they should support.

#### **B.** OBJECTIVES

The main objective of the present study is to find if the war on drugs, defined as the effort against illegal drug production, trafficking, and consumption, has an effect in the level of official corruption in Colombia.

#### C. THE RESEARCH QUESTION

The primary research question for this thesis is: is there a correlation (relationship) between the efforts against illegal drug trafficking and the level of official corruption in Colombia? Before answering this question, it is necessary to address the following supporting questions: What is the war on drugs? What is the United States anti-drug policy, and how has it evolved over the years? What kind of influence does the United States have over anti-drug policy decisions in Colombia? What is the Colombian policy to attack this problem? What is corruption and how it can be measured? Answers to these questions will provide the background needed to establish a relationship between the two variables in question.

#### D. SCOPE, LIMITATIONS AND ASSUMPTIONS

#### 1. Scope

Given the weak social and economic conditions of most illegal-drug producing countries, the war on drugs exerts a big impact on: the economy, the crime levels, violence, corruption, environment, drug abuse, and in general, in every aspect of the social context. Colombia which is one of the biggest producing countries does not escape this situation.

The study concentrates on the effect that the effort against illegal drug trafficking (war on drugs) has, if any, on the level of official corruption in Colombia. Therefore, official corruption, in this context, includes all corrupt practices by government officials, related or not to the narcotics trade problem.

When the term action against illegal drugs is mentioned in the analysis chapter of the thesis, it refers to actions and policies taken by the Colombian government in this area. A summary of significant changes and evolution of the United States anti-drug policy is included in Chapter II, and provides the necessary background to understand how the U.S. policy affects Colombian government decisions regarding illegal drugs.

#### 2. Limitations

The most significant limitation in the conduct of the analysis is the lack of a reliable mechanism to measure corruption. This situation requires the development of a method to measure corruption, with a corresponding set of assumptions to support it. The assumptions made are explained in the following sub-section.

Another important limitation was the difficulty in obtaining information on the number of articles regarding corruption and government officials published by the Colombia's newspaper *El Tiempo* due to the lack of a computerized information system at *El Tiempo* prior to 1990. Because of this, the data for the analysis is from 1990 to 1995.

#### 3. Assumptions

The level of effort against illegal drugs and the level of official corruption are the central points of the thesis. Therefore, mechanisms to measure those are of the most importance. Both variables are very complex, and there is no perfect unit of measure to rely on. Because of this, several assumptions are made to measure the variables. To measure the level of action against illegal drug trafficking, the assumption is made that in addition to the budget, the commitment to act against the problem plays an important role. Commitment is the level of motivation that the government and law enforcement agencies have at a particular point in time. A detailed explanation of this concept is included in Chapter IV. On the corruption side, the assumption is that the number of articles regarding corruption in Colombia and Colombian government officials published by the Colombia's newspaper *El Tiempo* from 1990 to 1995, and by *The Economist* magazine from 1985 to 1995, represent a good approximation of the level of official corruption in Colombia.

Another important assumption is that both publications are unbiased regarding political issues and corrupt practices by Colombian government officials.

#### E. METHODOLOGY

To define the variables, the study is based on social research techniques. Analytical techniques are used in the analysis of the data. For variable definition, the first set of information required is the historical data regarding the United States and Colombian policy towards illegal drugs. This will help us visualize the significant changes and the evolution of policies over the years. The information is collected using official publications available from both governments, and previous research in the topic. As mentioned earlier, information regarding official corruption in Colombia is collected with a detailed search on articles referring to corruption and government officials published by the Colombia's newspaper *El Tiempo* and *The Economist* magazine.

This thesis does not attempt to develop a perfect mechanism to measure corruption; the methodology used is to conduct the analysis and develop a trend of the level of official corruption in Colombia using the information and assumptions described above. This way there is no need to assign numerical values to corruption. Then, the trend will be compared to action against illegal drugs in the same time frame. The two variables are compared using analytical techniques. More specifically, the statistical package MINITAB is used to find the relation between the two.

#### F. SUMMARY OF FINDINGS

During the collection of data regarding anti-drug policies of both, the United States and Colombia, interesting facts were found. The United States policy on illegal drugs has concentrated mainly on the reduction of the supply abroad, with less emphasis on the problem of internal demand. Although there is a slight increase in the emphasis on internal demand reduction since 1994, (see Table 1) the general perception of the American people and officials is that the main problem is abroad.

If we look at the supply/demand ratio (Table 1), it shows a trend since 1989 of a gradual reduction in the percent of budget allocated to supply-side actions. Conversely, since 1989, there is a steady increase in the percent of the budget allocated to demand reduction.

In contrast with the United States' view of the problem, Colombian people and officials think that the main problem is the demand for drugs in the United States and in several European countries. Nevertheless, since the late 1980s, Colombian government officials have publicly accepted that the supply of illegal drugs is also a major component of the problem; still, the general perception in Colombia is demand oriented. Regarding policy actions, Colombia's anti-drug policy has been reactive to U.S. pressures and to the impact of special events such as the assassination of government officials, judges or political figures.

In terms of the relationship between the war on drugs and the level of official corruption in Colombia (the main purpose of this thesis), the analysis of the data indicate that the two variables are linearly correlated. In other words, if the level of action against illegal drugs as defined in Chapter IV, increases, the level of official corruption in Colombia increases as well, but not proportionally. The level of correlation is 28.2 percent, indicating that not all official corrupt practices in Colombia are related to illegal drug trafficking. A complete review of the findings is included in Chapters V and VI.

#### G. ORGANIZATION OF STUDY

The following is a succinct discussion of the topics covered in the thesis and how they are organized to provide the background to answer the research question. Chapter II provides a brief description of the anti-drug policies of the United States and Colombia over the last twenty years. The description will help the reader to understand the war on drugs and how related policies have evolved over the years. The chapter is divided in two sections, each one devoted to each country. In Section B, Colombian Drug Policy, a subsection called U.S.-Colombian relations examines how illegal drug trafficking has affected the relationship between the two countries. Chapter III describes some of the most common definitions of corruption and defines a working definition of the topic in the framework of the study. Once the necessary background regarding the war on drugs and corruption is provided, the next step is to explain how the data to conduct the analysis was collected and how it is used to establish the relationship between the two variables. This information is included in Chapter

IV. The chapter is in three sections. The first one includes an historical review of the Colombian Defense Ministry budget since 1985. The second section explains the developing of the anti-drug action curve which is the basic independent variable in the analysis. The information used to measure corruption is described in the third section. This measure of corruption is the dependent variable in the correlation analysis. Chapter V explains the sequence and methodology used, and the results of the data analysis. It also contains a section with brief statistical definitions and concepts to help non-statistical oriented readers understand the analysis. Conclusions and recommendations for further studies are included in Chapter VI. The list of articles on official corruption published by *El Tiempo* used in the analysis is included in Appendix A. Appendices B and C summarizes the data and numerical values of the variables in the regressions using *LEVEL1* (corruption measured by the number of articles on official corruption in Colombia published by *El Tiempo*) and *LEVEL2* (corruption measured by the number of articles on official corruption in Colombia published by *The Economist*) as dependent variables respectively.

#### II. THE WAR ON DRUGS

To understand what the war on drugs is, and what its potential consequences are, it is necessary to review the basic policies driving it. This chapter provides a brief description of the drug policies of both the United States' and Colombia's governments since 1975. Instead of giving a detailed description of these policies, the main goal is to identify the highlights and any major changes in policy.

#### A. UNITED STATES DRUG POLICY

Since 1969, the United States has given high priority to reducing the inflow of illegal drugs from foreign sources. Efforts to reduce the supply of narcotics have been the primary impetus behind U.S. drug policy, and its importance relative to other approaches has been increasing ever since. The position of Senior Advisor for International Narcotics Matters was created in 1971, with an assistant secretary rank. The senior advisor, representing the Secretary of State, directs the Bureau of International Narcotics Matters (Office of Drug Abuse Policy, 1978). [Ref. 3]

Drug policies are implemented through United States regional bureaus and the various embassies. In Latin American drug-producing countries, the Bureau of Inter-American Affairs and the U.S. embassies play a very important role in coordinating and supporting U.S. drug policy. The following is a summary of Craig's [Ref. 3] explanation of the structure: a Deputy Assistant Secretary of State supervises anti-drug efforts in the Bureau of Inter-American Affairs. Each embassy has a senior diplomat acting as narcotics coordinator; he or she chairs a working committee composed of representatives from the Drug Enforcement Agency, Customs, the Agency of International Development, Agriculture, Defense, CIA, Legal Affairs, and the United States International Communication Agency. In countries such as Colombia, which produce large amounts of drugs, foreign service officers who are considered special assistants to the ambassador work full-time on narcotics matters. Their dual objective is to assist the ambassador in the difficult

task of creating awareness and to convince the host government to take action against illegal drug cultivation and trafficking--the first steps toward implementing policy.

In the late 1960s, marijuana production began to take off in Colombia as a result of the increasing demand for it in the United States. [Ref. 1] Then, in the early 1970s, the U.S. government tightened drug enforcement along the border with Mexico. Thus, the task of convincing the Colombian government officials, Congress, and military officers that a Colombian anti-drug effort was, first and foremost, in their nation's best interest was very difficult. At that time, Colombia's perception of the problem was demand-oriented. President Alfonso Lopez Michelsen (1974-1978) reminded the United States that the root problem was theirs, not Colombia's. Drug traffic, said Lopez, "never would have acquired its actual dimensions, if a permanent number of customers did not exist in the United States who supply large international chains with financing that have their origin in the very same United States" (Excelsior, 1978d). [Ref. 3, p.251]

In 1982, President Reagan, in response to domestic pressures to do something about the increasing U.S. drug problem, declared "war" on drugs. The Reagan administration's strategy was a full-scale attack against drugs, and against production, processing and trafficking abroad. Political parties and Congress strongly backed the initiative. The anti-drug campaign was also supported by intensive diplomatic efforts to gain the cooperation of producing countries, in some cases with threats of sanctions against countries judged uncooperative--or not cooperative enough.

In 1988, with the apparent failure of the anti-drug policy and with the November congressional and presidential elections approaching, the U.S. Congress enacted the Anti-Drug Abuse Act. The Act was the first piece of legislation to go beyond Reagan's supply-side programs to focus more explicitly on the demand side of the problem, assigning 50% of the federal anti-drug funding for fiscal year 1990 to domestic demand control and enforcement, as opposed to 30% in Reagan's policy. [Ref. 4, p.3] This major policy change in the war on drugs came as a natural response to the "failure" of Reagan's policy to achieve tangible results over two presidential terms. The effect of the changes has not been fully

observed, in part because they didn't last long: after his election, President Bush reverted to the supply side as the main focus of U.S. anti-drug efforts.

In September 1989, President Bush revealed the National Drug Control Strategy in compliance with section 1005 of the Anti-Drug Abuse Act of 1988. The strategy contained both domestic and international dimensions. The objective was to reduce the amount of cocaine, marijuana, heroin, and other dangerous drugs estimated to be entering the United States by 15% within two years, and by 60% within 10 years. [Ref. 5] The strategy included a number of international components which differed from previous policies. Perl [Ref. 5], summarizes the policy in four points: (1) provide limited economic assistance to producing countries [first time]; (2) concentrate more on disrupting the activities of the trafficking organizations, and less on disrupting the activities of farmers; (3) encourage increased Andean nation military involvement in counter-narcotics operations; and (4) enhance U.S. military support to host nation counter-narcotics forces. The strategy defines the national priorities on seven main areas: the criminal justice system; drug treatment; education, community action, and the workplace; international initiatives; interdiction efforts; research, and intelligence. Due to the nature of and scope of this thesis, a summary of the international initiatives and interdiction efforts priorities is presented. [Ref. 11]

- Disruption and dismantlement of drug-trafficking organizations.
- Reduced cocaine supply. Law enforcement, military, and economic assistance will be provided to the three Andean cocaine-producing countries to isolate major coca-growing areas; to block delivery of chemicals used for cocaine processing; to destroy cocaine hydrochloride processing labs; and to dismantle the trafficking organizations. Efforts in transit areas will be improved and Joint Intelligence Collection Centers will be created in the Caribbean Basin.
- Reduced heroin supply through efforts to convince other countries to exert influence on opium growers and reduce heroin processing and distribution.
- Reduced marijuana supply through strengthened foreign law enforcement and eradication, and through efforts to discourage minor producing nations from becoming major producers.
- U.S. assistance and encouragement for European community and multi-lateral efforts aimed at source country and transit country production and distribution, and at European consumption. European community support against international and regional drug organizations will be enlisted.

- Other international objectives:
  - Elevation of drugs as a bilateral foreign policy issue.
  - U.S. ratification of the United Nations Convention Against Illicit Traffic in Narcotics Drugs and Psychotropic Substances, along with other pending Mutual Legal Assistance Treaties. Other nations will be urged to ratify the Convention.
  - Support for the U.S. foreign aid certification process in order to achieve more effective supply- and transit-country compliance with American drug control objectives.
  - Bilateral and multi-lateral efforts against international money-laundering activities.

#### • Interdiction Priorities:

- Development of a comprehensive information-based approach to Federal air, maritime, land, and Port-of-Entry interdiction.
- Upgraded intelligence support to interdiction, through intensified interdiction-specific investigations and undercover operations.
- Enhanced computer support to interdiction through acceleration of machine readable documentation programs; installation of document machine readers at appropriate Ports of Entry; and development of the International Border Interdiction System (IBIS) and other computerized border information systems.
- Creation of interagency/interdisciplinary teams to analyze and target smuggling modes, methods, and routes.
- Concentration on high-value individuals and shipments.
  - Review of existing methods for deterring air smugglers.
  - Improved operations aimed at money couriers and shipments.
  - Improve container inspection techniques and intelligence.
- Enhanced border systems, operations, and activities.
  - Dramatically reduced document fraud, especially fraudulent use of U.S. birth certificates and other "breeder documents."
  - Expanded use of drug detection dogs, anti-vehicle barriers, and container inspections.

- Provision of automatic exclusion authority and general arrest authority to Immigration and Naturalization Service officers.
- Improved detection and monitoring systems and secure operations procedures.
- Expanded secure communications systems.

A major component of the Bush strategy was the "Andean initiative," designed to enhance assistance (economic, military, and for law enforcement) to Bolivia, Colombia and Peru. The initiative was an attempt to strengthen these countries' political/economic conditions and their capabilities to take effective action against narcotics; to increase their military and law enforcement organizations; to isolate coca-growing regions, destroy labs, and block delivery of precursor chemicals. By including the economic assistance program, the administration gained the cooperation of producing countries, generating multilateral consensus on the necessity to take action against drugs.

An Andean Drug Summit Meeting was held in Cartagena, Colombia in February 1990. At the conclusion of the meeting, the presidents of the United States, Colombia, Bolivia, and Peru issued a communiqué stating their willingness to cooperate with one another in a concerted attack on the drug trade, and to exchange information in such areas as movement of precursor chemicals and money laundering. [Ref. 5, p.125]

Although the main focus of U.S. policy was on supply-side actions, the Bush strategy was the first to include economic assistance to major producing countries. Producing countries' governments had been requesting such assistance so that they could follow the United States anti-drug policy effectively. Another key aspect of the policy was the desire to concentrate more on the disruption of trafficking activities than on the eradication of crops.

The Clinton anti-drug policy, released by the end of 1993, also contained both domestic and international components. Within the United States, the budget provides resources to link drug policy with other facets of the Administration's domestic policy, especially programs to stimulate economic growth, reform health care, curb youth violence, and empower communities. [Ref. 12] On the international front, the policy represents a lowering of the high profile given to narcotics control in the past. Clinton's policy treats the

problem as just another element of foreign policy, putting it on the same level as democracy, protection of human rights, and the support of marked-based economic growth. The plan suggests a gradual transition from policies that emphasize interdiction as the primary strategy (in transit zones), to ones that stress U.S. cooperation with producing countries that demonstrate the willingness to take action against narcotraffic. [Ref. 6]

Perl describes the major highlights of Clinton's international strategy in five main points: (1) linkage to other foreign policy objectives: illegal drug trade generates corrupting influences which, if not controlled, will undermine other foreign policy goals, such as democracy, human rights, rule of law, and a clean environment; (2) primary focus on cocaine; marijuana is not addressed; (3) a shift away from transit zone interdiction towards enforcement programs in producing countries; (4) emphasis on democratic institution building: the United States will support anti-drug programs in host countries that help to strengthen institutions that are compatible with democratic government; (5) host nation programs linked to foreign political will and likelihood of success: the United States will pay particular attention to, and implement programs in, countries that demonstrate a serious commitment to, and a likelihood of success in, anti-drug efforts.

The Clinton administration's plan has two important innovations, one on the domestic front and the other on the international. In linking the drug problem with the United States' general goals, and citing it as an important factor in achieving those goals, the government seems to recognize that the demand side is also important in the overall effort to counter the problem. The major change in international policy is the intention to gradually de-emphasize interdiction in transit zones, and to increase U.S. cooperation with host countries by assisting them with counter-narcotics training, economic aid, and crop eradication. Note that there is a major shift from the Bush plan, which concentrated on trafficking activities as opposed to crop eradication. Despite these differences, the overall burden of supply and demand remained unchanged during the first two years of Clinton's administration: approximately 65% of the budget to supply and 35% to demand-side actions (See Table 1).

The National Drug Control Strategy for 1995, released on February 1994 included significant emphasis on demand reduction programs, particularly treatment services for hardcore users and prevention activities for children and adolescents. Recognizing the strong linkage between hardcore drug use and its health and crime consequences to society, the drug control budget increases funds for drug treatment to a record level. [Ref. 12] For 1995, the budget request included 58.6 percent for supply, and 37.36 percent for demand reduction programs, indicating a slight change in the priorities. Table 1 includes the drug control budget (supply/demand ratio) from 1985 to 1995. The information contained in Table 1 reveals an interesting pattern: beginning from 1990, the budget assignment for supply side activities is gradually declining, while the demand portion is increasing steadily, expressing perhaps an unnoticed long-run policy change toward demand side programs.

|  | SUPPLY/DEMAND RATIO:<br>TOTAL U.S. FEDERAL DRUG CONTROL BUDGET<br>FY 1985 - FY 1995 (PERCENTAGES) |      |      |      |      |      |      |      |      |      |      |  |  |  |  |
|--|---|------|------|------|------|------|------|------|------|------|------|--|--|--|--|
| 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1992 |   |      |      |      |      |      |      |      |      |      |      |  |  |  |  |
| Supply*  | 68.5  | 69.5 | 70.2 | 68.0 | 68.4 | 67.2 | 65.3 | 64.3 | 64.2 | 61.9 | 58.6 |  |  |  |  |
| Demand   | 28.0  | 27.1 | 26.5 | 28.3 | 28.1 | 29.5 | 30.6 | 31.4 | 31.7 | 33.9 | 37.4 |  |  |  |  |
| Research   | 03.5  | 03.4 | 03.3 | 03.7 | 03.5 | 03.3 | 04.1 | 04.3 | 04.1 | 04.2 | 04.0 |  |  |  |  |
| (both) 100% 100% 100% 100% 100% 100% 100% 100          |   |      |      |      |      |      |      |      |      |      |      |  |  |  |  |

<sup>\*</sup> Supply figures include both domestic and international supply-reduction efforts.

SOURCE: ONDCP. Calculated from "National Drug Control Budget by Function," Budget Authority figures (FY 1985-FY 1994 actual; FY 1995 requested), *National Drug Control Strategy -- Budget Summary*, White House, February 1994, pp.184-187.

**Table 1. Federal Drug Control Budget** 

In summary, United States policy on illegal drugs has concentrated mainly on the reduction of the supply abroad, with less emphasis on the problem of internal demand. Although the Clinton's administration is increasing the emphasis on demand side, and the

implementation of plans has changed from government to government, the essence has remained unchanged.

#### B. COLOMBIAN DRUG POLICY

Colombian Policy on illegal drugs has changed several times in recent years. The basic pattern of change can be related to some extent to the level of pressure that the United States applied to gain the Colombian government's commitment to fight the war on drugs. This section explains the evolution of that policy since the late 1970s, and the positions of each government since the 1970s.

A good point to begin the description of the Colombian anti-drug policy is the statement made by President Alfonso Lopez Michelsen (1974-1978) in February 1978 reminding America's public and officials that they were the root of the drug problem, not Colombia's (see Section A of this chapter). In general, that was the position of Colombia's politicians and government officials in the late 1970s and the early 1980s. That perception has changed over time; now, many people in Colombia believe that the drug problem is not only United States' problem but also Colombia's. Although the general perception has evolved, Colombian officials had never agreed to the idea that the Colombian side of the problem (supply) is larger than the United States' side (demand).

The following section provides a short review of U.S.-Colombian relations and sets the background to understand the evolution of drug policy in Colombia, and the role that American pressure has played in that evolution.

#### 1. U.S.-Colombian Relations

Colombia's and United States' friendly relations during the nineteenth century were complicated during the first two decades of the twentieth century as a result of the U.S. intervention in the separation of Panama from Colombia. This situation generated diplomatic tension; however, economic ties suffered little. As Hanratty and Meditz [Ref. 1, p.238] state, "the United States was the major market for Colombia's leading export and source of revenue: coffee." After 1920, President Marco F. Suarez (1918-1921) adopted a policy that linked Colombia's destiny to the United States, through geography, trade, and democracy.

This approach was backed by subsequent governments, but especially by Enrique Olaya Herrera (1930-1934). During World War II, relations between Washington and Bogotá were very good. Although Colombia's commitment to the Allied cause didn't include sending troops, the strategic position of the country<sup>2</sup> and its pro-allied stance were helpful to Allied Nations. Colombia also participated in the UN Force in the Korean War with one Army battalion and three frigates. Colombia was the only Latin American country to send troops to the UN Emergency Force in the Suez conflict (1956-1958). All this support for the U.S. and international organizations strengthened the relations between Washington and Bogotá and led to more cooperation and economic assistance.

During the 1960s, President Kennedy's "Alliance for the Progress" program toward Latin America that called for economic assistance and social change by recipient countries played a key role in keeping relations on friendly and cooperative terms. Nevertheless, leading economists and government officials stated that Colombia's increasing dependence on the United States market was causing problems for the Colombian economy. Despite some isolated events, the U.S. and Colombia maintained a good level of understanding and cooperation during the period before 1975.

#### 2. Colombian Anti-Drug Policy

This section explains the environment and the actions that each Colombian Government took regarding drug activities since President Alfonso Lopez Michelsen (1974-1978). Before proceeding, it is important to make clear that under the Colombian Constitution, the President is the Commander in Chief of the Armed Forces,<sup>3</sup> and has full authority and responsible for foreign relations. Some international decisions such as declaring war and ratification of treaties need Congress's approval.

Colombia is located in the north west corner of South America, has coasts both in the Atlantic and Pacific oceans, and is very close to the Panama canal from both coasts. The strategic value of this location is that of control of the maritime lines of traffic. The Colombian Navy was involved in the control of such transit areas during World War II, and there is evidence of the sinking of one German submarine during that period.

<sup>&</sup>lt;sup>3</sup> Colombian Armed Forces include the Military services (*Army, Navy, and Air Force*), and the National Police.

Prior to 1974, anti-drug efforts in Colombia were isolated and didn't have a coherent goal. When President Lopez took office, the police and other enforcement agencies were corrupt. Effective actions in the anti-drug field were difficult because some people involved in the drug trade held official office. During his government, President Lopez changed key personnel in organizations like the Administrative Department of Security (DAS) and in the security police, trying to reduce levels of corruption that existed in those agencies. As stated in Section A, President Lopez believed that the problem was the U.S. demand; therefore, he was not willing to cooperate decisively with the U.S. policy.

In 1977, in response to U.S. pressure, President Lopez initiated an expanded campaign against cocaine traffic. The campaign, summarized by Bagley [Ref. 2], consisted basically in crop eradication, assignment of anti-narcotics units of the National Police to seaports and airports, and the reorganization of the judicial police. U.S. pressure was supported by a security assistance package costing \$3.7 million. [Ref. 2] Presidential Candidate Julio Cesar Turbay Ayala opposed the decision and launched a frontal assault against the expanded campaign during the presidential campaign.

On April 1978, in the thick of presidential campaigning, commentator Morley Safer of CBS "60 Minutes" revealed that a confidential memorandum to President Carter from Dr. Peter Bourne charged two Colombian Ministers and a presidential candidate with involvement in narcotics: General Abraham Varon Valencia, Minister of Defense; Oscar M. Montoya, Minister of Labor; and Julio Cesar Turbay Ayala, the front-running Liberal Party candidate. Their denials of the allegations were categoric and swift. [Ref. 3] President Lopez strongly supported the Presidential Candidate and the two Ministers denying the accusations. Turbay Ayala, in a letter to U.S. Ambassador in Colombia Diego Asencio, stated:

Both President Lopez and Mr. Bourne categorically denied the false allegations, which are the result of the dirty campaign against my reputation. [Ref. 3]

Asencio's reply, read in part:

It is the position of my government that there is no proof that you may have had any part in the drug traffic. I find incomprehensible and absurd the use of any allegation of your participation in the drug traffic (Miami Herald, 1978b). [Ref. 3]

Julio Cesar Turbay Ayala became President in 1978 after facing the accusations of drug traffic involvement described previously. The United States took advantage of this situation and promptly initiated political pressures for a frontal assault against narco-traffic. Although he opposed President Lopez's anti drug campaign, in his inaugural address he declared war on traffickers and promised restoration of law and order. Turbay's commitment against drug trafficking improved relations between the U.S. and Colombia. On September 6, the government promulgated the "statute of security." The purpose was to set a legal security environment that would permit democratic institutions to operate and defend themselves. It would become, said Procurator General Guillermo Gonzalez Charry, "a battle without quarter against the two principal problems of immorality that plague Colombia: administrative corruption and narcotics traffic" (Excelsior, 1978a).

The drug policy under Turbay's Presidency had four important aspects. First, attempts to discover the real extent of the problem were taken for the first time, and, as a consequence, the problem was better understood. This was the first time that a Colombian government accepted that drug trafficking could have a big impact on both the economy and the society of the country. Craig, explained the situation with the following words: "A lion's share of the blame was still laid at Washington's feet, but Bogotá accepted its share for the first time." [Ref. 3]

Second, President Turbay ordered the military to assume the major role in the antidrug efforts. The military participated in "Operacion Fulminante," in the Guajira Peninsula, with around 4,000 personnel, including three battalions, supporting units, naval ships, and aircraft. The operation was a frontal attack against marijuana cultivation, drug smuggling,

This was the first time that Military units assumed a major role in anti-drug activities. The military had played only minor roles in previous programs.

and guerrilla activities in the northern departments. Results were very impressive: over 6,000 tons of marijuana and nearly 300 aircraft and vessels were seized [Ref. 2], thus increasing the prestige of the Military Forces.

Third, the anti-narcotics unit of the police were increased in size, received more responsibility, and were granted salary increases. Increasing the salaries was absolutely necessary to reduce the level of bribery and related corruption. The salary of a police agent (agente de policia), which is the lowest rank in the Colombian National Police, was at that time equivalent to the minimum wage: 2,340.00 Colombian pesos, about U.S. \$66 a month. This salary was not enough to provide for the minimum requirements of a family maintaining a decent standard of living. It was common to see policemen and criminals living in the same neighborhoods and in the same precarious circumstances. This situation made policemen susceptible to accepting bribes, thus increasing the level of corruption.

Fourth, President Turbay agreed in 1979 to a U.S.-Colombian extradition treaty that permitted Colombian traffickers accused of crimes in the Unites States to be extradited and tried in the U.S. courts.

Although relations with the United States suffered a setback when in 1980 the President ordered the military to abandon the efforts on the Guajira Peninsula, the overall commitment of Turbay's government toward illegal drugs was strong. The military experience in "Operacion Fulminante," was very good, resulting in the United States asking for more military involvement. Despite the U.S. request, the Colombian government and military leaders gave priority to the guerrilla war and sent the troops back to fighting insurgency groups. Bagley identified six important insights that the military experience in the Guajira Campaign provided. First, the army's campaign did put a serious dent in the marijuana trade in the region, even though it did not halt it altogether. Second, the costs to the local population were high and deeply resented. The Guajira Peninsula is a region that is practically isolated from the central government's control. The region is very dry and facilities such as roads and airfields are rare. Because of this, a kind of "unofficial agreement" evolved, in which the government "accepted" contraband (not drug related) and other minor illicit activities. The marijuana boom provided wealth to the region and

especially to growers, and since they were isolated and used to a lack of government intervention, the impact of "Operacion Fulminante" against marijuana exerted a big economic and social impact on the population. Third, to the extent that enforcement efforts in the Guajira were successful, they tended merely to displace drug cultivation and transport activities to other parts of the country, rather than eliminating them. Fourth, the Colombian military was susceptible to drug corruption. Fifth, once the military withdrew, the traffickers proved to be quickly able to reestablish activities. Sixth, because supply-side eradication and interdiction campaigns were not coupled with parallel demand reduction programs, there was little (if any) hope of achieving a permanent cessation of drug trafficking. [Ref. 2, p. 80] Validating the last point, President Turbay noted: "Colombians are not corrupting Americans. You are corrupting us. If you abandon illegal drugs, the traffic will disappear."

From 1982 to 1986, the President was Belisario Betancur Cuartas, who began his government with reservations about the war on drugs, and refused on nationalistic grounds to honor the extradition treaty signed by his predecessor. Despite his "uncooperative" attitude towards Washington, Betancur did take measures against drug cartels. Anti-drug operations led by Justice Minister Rodrigo Lara Bonilla were highly successful, leading drug dealers to put out a contract on Minister Lara. The Minister was assassinated on April 30, 1984.

Following the assassination of Minister Lara, the President proclaimed a "war without quarter" against the traffickers, and agreed to sign an extradition order for Carlos Lehder (a top drug dealer) to the United States. The actions taken by the government were strongly supported by the public, and results were impressive in all regards. Betancur's crackdown forced cartel leaders to leave the country. Some of them went to Panama where they paid strongman Manuel Noriega \$4-5 million for protection. [Ref. 2, p.82]

Of more devastating consequence to Colombia during this period were the escalating attacks on its judiciary system, as part of the traffickers' attack against extradition. Between 1981 and 1986 over 50 judges, including a dozen Supreme Court Justices, were murdered.

<sup>&</sup>lt;sup>5</sup> "The Colombian Connection," *Time* (January 29, 1979): p. 29.

Any judge handling a drug case was the target of death threats if he/she refused to be bribed.<sup>6</sup> This situation provided the basis for the new "faceless" judicial system, which was established to protect the integrity of the judges by keeping their identity a secret.

President Virgilio Barco Vargas (1986-1990) promised to continue the fight against drug trafficking with the same level of commitment as his predecessor, but there is no evidence that during the first two years of his mandate, the anti-drug effort was any stronger than previously.

One of the most important setbacks in the anti-narcotics efforts during this period occurred when the Supreme Court in early December 1986 declared the extradition treaty unconstitutional because it had not been signed by President Turbay himself but rather by the Minister of government.<sup>7</sup> To fix the situation, President Barco signed the treaty to bring it back into effect.

The level of anti-narcotics activities increased dramatically after the assassination of Guillermo Cano Isaza, a crusading anti-drug publisher of one of the biggest newspapers in Colombia. The assassination occurred just three days after the ratification of the extradition treaty by President Barco. In this offensive, good results were achieved especially in the middle leadership of the cartels; however no major cartel boss was captured.

Following Barco's Presidency, Cesar Gaviria Trujillo (1990-1994) started a policy of "submission to justice" to drug traffickers, offering reductions of judicial penalties, while at the same time applying government pressure via security and intelligence forces. The initial results of this approach were good, leading to the surrender of drug lord Pablo Escobar Gaviria with the condition that he would not be extradited to the United States. But victory was far from permanent; several months later, Escobar escaped with the help of prison officials, apparently because he feared extradition. After the escape, the attitude of the government shifted dramatically, The government launched a frontal attack and started a

In the Colombian judiciary system, the judge is responsible for the verdict. There is no jury.

Under the provisions of the 1886 constitution, normally the Minister of Government assumes Presidential functions in absence of the President (i.e. when the President attends international meetings).

campaign to pay for information leading to the capture of cartel leaders. The submission option was still open, but the pressure was much more than before.

With the desperate situation, due to the uncertainty created after Escobar's escape from jail, a "search block" was organized in Medellin to dismantle the cartel and capture its bosses. The search block was composed of elite units from the Army, Marines, Air Force, and the National Police. Impressive results were accomplished by the block: in less than a year and a half, the Medellin cartel was completely dismantled, and its principal boss, Pablo Escobar, killed. The prestige of the government increased and also the country gained international appreciation for its efforts.

Another important aspect of the drug policy during the Gaviria's administration was the signing of the new Constitution (1991). For that purpose, a National Constituent Assembly (Asamblea Nacional Constituyente) was elected, where all political parties and interest groups were represented. The final product (the new Constitution), is more in line with reality and attempts to lead the country into the next century. With respect to drug issues, a major setback was included: the constitution does not allow extradition of Colombian citizens. This was considered by the United States as a step backwards in antinarcotics efforts.

Before entering the political arena, President Samper (1994-present) and other prominent Colombian economists favored legalization of marijuana. As President of the National Association of Financial Institutions (ANIF) in the late 1970s, he lead the movement toward legalization. In 1980, Samper [Ref. 8] said:

... let us not forget, that the reality of marijuana in the United States is that they are smoking it in colleges, in factories, on buses, in parks, in homes. ... and this greater permissiveness is leading slowly but surely toward legalization of the consumption of marijuana. Therefore, we, in ANIF, recommend that legalization should be the result of a common joint effort between the two countries. We think it should be legalized simultaneously, on both sides, on grounds commonly agreed to. To think otherwise would not appear sensible.

He believed that the problem was essentially economic. Colombia's parallel economy was destabilizing and undermining its legitimate counterpart. This in turn was a threat to political stability and the nation's democratic traditions.

During the 1994 presidential elections, a tape containing conversations regarding drug money to finance Samper's campaign was released by the U.S. Drug Enforcement Agency (DEA) and the U.S. Embassy in Bogotá, and given to the Colombian authorities for investigation. Although the veracity of the tape has not been proven, the situation generated political disputes and a sense of unrest in the whole country.

Despite the tape and the alleged implications, Samper won the elections in a very close second round<sup>8</sup> against conservative candidate Andres Pastrana Arango. His position during the campaign, even before the tape incident, favored the war on drugs. This change of mind with respect to what he believed in 1980 was used by his opponent during the campaign. Once again, as in 1978 with President Turbay, the United States took advantage of the situation and demanded in exchange for political support, "results" from the new government in the anti-drug campaign.

Since his inauguration on the seventh of August 1994, President Ernesto Samper has maintained a strong position against the Cali cartels which replaced Medellin as the leading drug dealers. Although the President and other members of its Presidential campaign are being investigated for supposedly having received drug money in the campaign, their results in terms of capturing drug bosses are the best ever. In less than six months, the authorities put in jail seven of the eight Cali cartel leaders, including the two most important. Antinarcotics efforts and a willingness to cooperate with the United States is strong, and looks to remain unchanged.

In summary, the Colombian Policy on illegal drugs has been consistent in the sense that the commitment to attack the problem is present, but the level of pressure (commitment) shows a variation depending on two factors: first, the level and the kind of pressure that the United States applies to Colombia, and second, the internal security situation. Every time an

In Colombia, a second round of votes is necessary if no one gets more than 50% of the votes in the first one. Only the first two candidates participate in the second round.

important person is assassinated, or the level of drug-related violence increases, the government reacts with frontal attack but only for a limited time.

#### III. CORRUPTION

What is corruption? There are many perspectives from which corruption may be viewed or analyzed. Each perspective has its own set of questions and its own method of answering those questions. This chapter describes some of the most common definitions of corruption and viewpoints on corruption. This chapter will attempt to provide a working definition of corruption in the context of Colombia's anti-drug policy.

#### A. DIFFERENT PERSPECTIVES AND DEFINITIONS

James C. Scott [Ref. 10], believes that corruption involves a deviation from certain standards of behavior. The first question is, what criteria shall we use to establish those standards? In a broad way, he defines three criteria from which to choose: the public interest, public opinion, and the legal norms. Public interest and public opinion criteria pose great difficulties in their definitions. A standard of "public interest" would require an unambiguous definition of public interest so acts could be classified as to whether or not they serve the public interest. The problem is how to define public interest in a way that fits the points of view of all people concerned. Public opinion is another way to define the standards; this could be done by asking whether the public considers an act corrupt and then using the public's judgment as the definitional criterion. This approach will permit a differentiation of the corrupt acts, but the public's judgment would undoubtedly be divided or ambiguous on many issues. Then, the question becomes: should we take the majority's view, the consensus among the most powerful, the best opinion, or some other criteria? The first two alternatives will always lead to controversy and a difference of opinion.

The third alternative is to rely heavily on legal norms in defining corruption. While this definition has shortcomings, it seems the most satisfactory alternative. Scott defines corruption as:

Behavior which deviates from the normal duties of a public role (elective or appointive) because of private-regarding (personal, close family, private

clique) wealth or status gains: or violates rules against the exercise of certain types of private-regarding influence (Nye, 1967, p.416).<sup>9</sup>

The initial part of the definition refers to the person in the transaction who occupies a public role or office, and the last part to the person acting in a private capacity. Corruption generally requires two parties.

It is very important to frame the definition in such a way that no ambiguity exists on what is included and what is not. For example, says Scott, a powerful lobby's ability to secure passage of a law that greatly benefits its members does not in itself constitute corruption unless it can also be shown that the lobby bribed legislators or otherwise violated formal norms.

Corruption may also be seen as one of the ways an individual can persuade someone who exercises public authority to act as he or she wants; in this perspective we can consider it as a kind of influence. We need to be careful here because many ways to influence or persuade individuals are legitimate; for example appealing to regulations or to equity issues. Scott [Ref.10 p.21] states that influence is corrupt when, without the special consideration of kinship, bribery, or friendship, the public official would not have made the same decision. While most of the time this is true, there are cases where the public official decision could be influenced by having him understand reality (facts and situations); in this case, without that external influence he or she could never make the "right" decision.

Other definitions of corruption included in the Internet Corruption Ranking page [Ref. 13] are: general definition: "corruption is the misuse of public power for private benefits" (senturia, 1931); legalistic definition: "a person is guilty of corruption who being... a public servant, accepts, or obtains, or agrees to accept, or attempts to obtain from any person, for himself or for any other person, any gratification whatsoever, other than legal enumeration, as a motive or reward for doing or forebearing to do any official act ... or for rendering or attempting to render, any service or disservice to any person." (Indian Penal Code)

Nye's definition is taken from Scott, 1972, [Ref. 10, p.4]

In her book *Corruption: A Study in Political Economy*, [Ref. 14] Susan Rose-Ackerman says that there are at least seven types of interactions in which individuals try to influence the government. First, the relationship may be wholly legalistic. Individuals follow the rules as spelled out by the law without trying to obtain preference or change the rules, that is, they wait their turns, fill out forms, obey traffic signals, pay entrance fees, and supply goods at prices set by the government. Second, friendship, family ties, or personal loyalty can determine an agent's actions. Third, individuals might try to persuade or inform government officials. Fourth, citizens may work through the legal system by bringing lawsuits or seeking injunctions. Fifth, if the government is democratic, individuals could try to influence the outcome of the next election or sponsor referenda on important issues. Sixth, they could offer bribes. Finally, citizens may use threats to make officials do what they wish.

Looking at those seven points, it is clear that some of them are not directly related to corruption; for example, a legalistic relationship or informing a government official does not constitute an act of corruption. The two more relevant are: offering bribes and threatening officials. Also, note that different kinds of interactions are not mutually exclusive, meaning that any combination of two or more is possible.

Rose-Ackerman defines the interrelationships among voters, politicians, and interest groups. For this thesis, the model and characteristics of interest groups described by her [Ref. 14], can be used with some modifications to explain how drug cartels (considered here the interest group) determine their political efficacy. An interest group must consider the benefits and the costs of attempting to change an official outcome. The study says that on one hand, the more competitive an industry, the more it "needs" government aid. On the other hand, organizing a well-financed group may be difficult in a more competitive industry. Illegal drug organizations operate in a very special environment, which to some extent can be considered an illegal monopoly. Because drug cartels are well organized and the industry is not very competitive, conceptually they don't need government help. The latter is also

For those interested in how the electorate's motives and information affect both legislative and interest group behavior, or on how legislative organization affects the actions of interest groups see *Corruption:* A Study in Political Economy by Susan Rose-Ackerman, 1978.

reinforced by the fact that being illegal places them out of any possible legal help from the government. But in reality these organizations need government help; at the highest level to change legislation on the criminal justice system, and at the lowest level to prevent arrest and drug seizures. These are the levels where corruption is found. Most studies on corruption concentrate on bribes as a way to influence the behavior of an official agent, but as we shall see, there are several other ways to influence an official agent. Taking this into consideration, it is important to recognize that the environment plays an important role in determining the kind of activity used. For example, an individual speeding on the highway might try to bribe the officer to avoid paying a higher fine; in the political arena, to get a nomination for public office, an individual is most likely to use family ties or a friendly relationship to influence the decision.

Threats to exert influence deserve special treatment because people who are threatened are understandably willing to comply and most people would consider such compliance not necessarily corrupt. Threats themselves can be classified in three main groups: economic, of relationship, and physical. Which threats are corrupt and which are not? Take a situation for example, where countries or international organizations threaten other countries with the establishment of economic sanctions in exchange for political change. Shall we consider this an act of corruption by the threatening country, by the recipient country, or by both? The answer is very hard to frame because in this case there is no valid regulation nor consensus on what is right or wrong. Essentially, each party believes that its position is legitimate based on its own set of values and beliefs. These kinds of threats are not common within a country's political system, largely because individuals don't have the economic power to exert that kind of influence on their government. In a smaller perspective, an economic threat can be used by a boss to influence the behavior of a subordinate; for example, the supervisor can threaten his subordinates with lowering their pay grade. But in public agencies the culture is to follow directions. Therefore an economic threat is not a very common practice in that environment.

A relationship threat introduces variables such as prestige, self esteem, and career progression. In this case the gains from an exchange are, on one side, the desired outcome

requested by the "threatening" person(s), and on the other, the approval and appreciation of the requesting person. This kind of threat is commonly used, and it is considered "corrupt" only when the official agent deviates from legitimate procedures and behavior. For example, a powerful politician, say, a senator, may use relationship threats to influence a low-rank police officer in minor incidents.

The third group is physical threats. This kind of threat is not very common, nor considered as a particularly good way to influence public officials. Available research with some exceptions fails to address the impact and scope of such interaction. Physical threats will come as a consequence of unsuccessful attempts to influence individuals with traditional corrupt behaviors. This is the last tool that a corrupt person will use to obtain what he or she wants from the government. The issue of a physical threat incorporates a new ingredient in the scale of measures from which individuals are to be judged. Let's consider the following situations:

- A policeman accepts money from a drug dealer to forego the inspection of a suitcase in the airport.
- A second policeman receives a death threat to his family, and is asked to forego the inspection of a suitcase in the airport.

Is there a difference between the two cases? Shall both policemen be treated equally? Are both corrupt to the same degree? Here there is another difficult situation, and again there is no exact definition to follow. If we look at the basic definition of corruption, both are equally guilty. But if we examine the human rationale, we may conclude that the second policeman has to some extent legitimate motives to accept the bribe.

Throughout the range of perspectives and viewpoints regarding corruption, the following definition seems appropriate within this thesis. "Corruption is the misuse of public power for private benefits." Misuse means "out of the normal practices, regulations or law," and private benefits are those not considered as regular benefits inherent to the job. It is important to add that generally there are two parties involved, and an act is considered corrupt in the case of the offering party with the offering itself, and in the case of the government official only if he or she complies with the request (if it's illegal). Within this

definition, I would like to reemphasize the concept of a physical threat because it is particularly important in corruption caused by illegal drug trafficking.

## B. CORRUPTION IN COLOMBIA

This section describes how the definition of corruption developed in Section A fits corruption in Colombia, and how the war on drugs has affected corrupt practices.

Drug cartels are very powerful organizations in Colombia; although they are not powerful in numbers, they are powerful in financial and logistics resources, weaponry, and extensive protection networks. Cocaine mafia organizations such as the Medellin and Cali cartels have penetrated into the decision making structures of Colombia such as legislatures and the public forces. Lee [Ref. 15] states that the size of a mafia operation requires the explicit coordination of many transactions as well as an information-gathering system and record keeping. Cartels are too big and too complex to escape detection, and they are also vulnerable to penetration by law enforcement agents. Because of this, they have to make large cash payments to official agents to protect their laboratories and smuggling routes and to keep their executives out of jail. Their protection system includes a well-organized intelligence network that extends to enforcement agencies. According to Lee it extends, perhaps, to U.S. embassies operating in drug producing countries.

These organizations also have the capacity to perform violent acts, which are used as a threat to discipline their own people, and to influence government officials. This "war fighting" capability is being used to influence judicial outcomes with a practice called "your life or the money," meaning that the government official has two alternatives; take the money and do what they wish, or die. During the 1980s and 1990s this became a common practice against uncooperative judges, public officials, and newspaper writers.

### 1. Practices and Tactics

Cocaine traffickers use a combination of the carrot and stick to influence drug enforcement policies. [Ref. 15] Colombia mafias use coercive tactics against uncooperative officials or officials who publicly condemn their activities. The preferred method is to use financial means such as bribes, donations, and charitable activities to achieve their goals.

Money is the mafia's most important political weapon; it is used to build a public following among poorer classes, to buy protection from law enforcement officials, and to corrupt the political establishment. Violence, as stated in the previous section, is normally the last resort and is used only against officials who cannot be bought.

#### a. Pressure Tactics

Mafia pressure tactics fall into two categories: blackmail and the threat or use of violence. In Colombia the cartels have used money and special campaign contributions as a wedge for later blackmail or defamation of an official. This practice is often used even if the official does not accept the bribe. They simply include the person in their payroll list and then release a copy to the authorities, thus putting the official's reputation at risk. A notorious case involved the Minister of Justice in the Betancur administration, Rodrigo Lara Bonilla, and a drug trafficker named Evaristo Porras. Lara was elected to the Senate in 1982 and appointed to Betancur's cabinet in August 1983. As a Senator he led a congressional movement against drug money, and as Minister of Justice was very active against drug dealers, revealing in public for the first time, names of people involved and organization structures of the cartels. However, in the peak of his efforts, Lara was accused of being on the mafia payroll. His accuser was an Antioquian congressman with close ties to Pablo Escobar [Ref. 15], who presented a check that Porras had made out to Lara's name for one million pesos (about \$14,000 U.S.) and a tape of a supposed conversation between Lara and Porras in Bogotá.

Lara's defense was that he had been set up; he said that the check never passed through his hands, that he never met Porras, and that the check was part of a transaction between Lara's company and one owned by Porras. The accuracy of such an accusation has never been proven. Nevertheless, the Minister continued in the cabinet as an active fighter against drugs until he was shot to death in April 1984.

The other category is the threat or use of violence against government officials. The following description of infamous threats and violence in Colombia is based primarily on *The White Labyrinth* by Rensselaer W. Lee III. Although Lee states that many threats are linked to extradition cases, a contention that I don't fully agree with, such cases

were abundant in the 1980s, and should be considered in any study of corruption in Colombia. Most of the extradition requests by the United States to the Colombian government involve drug traffic and related offenses, and the narcotics lobby was until 1991 clearly at the forefront of the national opposition to the extradition treaty.<sup>11</sup>

The assassination of Minister Lara (1984) triggered a chain of actions that raised the level of confrontation between the drug cartels and the government. The government began to authorize extradition of drug traffickers to the United States, causing a series of death threats directed at Colombian law enforcers such as the Minister of Justice, Enrique Parejo, and against justices of the Colombia's Supreme Court. In some cases the messages were anonymous and did not give a reason for the threatened violence. Other massages were specific and terrifying. For example, an article published in *El Espectador* a well known daily newspaper in Bogotá on March 3, 1988 revealed a letter circulated by the Extraditables to several Supreme Court Justices in December 1986 which reads in part:

We declare war against you. We declare war against all the members of your family. As you may suppose, we know exactly where they are--we will do away with your entire family. We have no compassion whatsoever--we are capable of anything, absolutely anything. We also have families. Botero [a pro-extradition Colombian Supreme Court Judge murdered early that year] had a family, too, wife, sons, parents, and brothers. He was a miserable government patsy and an anti-nationalist, pro-Yankee traitor to his country. [Ref. 15]

The cocaine mafia also tries to dictate national rules on narcotics control. One of the most important political objectives of the mafia at the time was to force the government to adopt a policy of not extraditing Colombians to the United States. Moreover, the mafia seeks to paralyze the top echelons of the Colombia's criminal justice system and to discourage political crusaders against the cocaine industry. Where national drug policy is concerned, states Lee, violence rather than bribery has been the trafficker's main political weapon.

<sup>11</sup> The 1991 constitution does not permit extradition of Colombian citizens.

In July 1986, Hernan Baquero Borda, a Supreme Court Judge who helped draft the 1979 extradition treaty, was murdered by motorcyclists in Bogotá. Also in July, Raul Echavarria, Deputy Director of the Cali daily *El Occidente*, was shot to death after writing an article advocating the death penalty for major traffickers. [Ref. 16] In October, a Medellin Superior Court Judge, Gustavo Zuluaga, was murdered and his wife wounded in Medellin. Zuluaga had issued an arrest warrant against Pablo Escobar and his cousin Gustavo Gaviria as the possible "intellectual" authors of the murder of two detectives who participated in Escobar's arrest for possession of cocaine in June 1976. The day after the arrest warrant was issued, four men intercepted Zuluaga's wife while she was driving near Medellin, forced her out, and then pushed the car over a cliff. "Next time, we'll make you stay with the car." [Ref. 17]

In November 1986, Colonel Jaime Ramirez Gomez, a highly respected police officer and former head of Colombia's Anti-Narcotics Police, was killed in the vicinity of Bogotá while he was returning from vacation. Ramirez was clearly a major thorn in the mafia's side. He was preparing to write a book revealing the results of many years of investigation into Colombia's cartels. He allegedly had evidence linking Pablo Escobar to the assassination of Minister Lara Bonilla. In December, the mafia disposed of another leading crusader against illegal drugs. Guillermo Cano, the editor and co-owner of the daily *El Espectador*. Cano's signature appeared on several editorials advocating that Colombian drug traffickers be sent to the United States to stand trial. Violence and death threats were also carried out outside of Colombia; in early 1987 Enrique Parejo Gonzales, who had been Minister of Justice under Betancur's government was shot and severely wounded in Budapest. At the time he was the Colombian Ambassador to Hungary. Parejo had been an outspoken supporter of extradition and in his capacity as Minister of Justice approved several U.S. extradition requests by the United States.

Another pressure tactic sometimes used is kidnaping. The kidnaping of Andres Pastrana, then a candidate for mayor of Bogotá and a very prestigious politician, and the kidnaping-murder of Attorney General Carlos Mauro Hoyos in early 1988 are examples of the tactic of kidnaping. Both actions were carried out by the Extraditables, and both were

political statements against extradition. In the case of Pastrana, he was released with the condition that he personally deliver a message to the President regarding their anti-extradition demands.

This "mar de sangre" (sea of blood) and intimidation has resulted in the loss of confidence in Colombia's political institutions. A national Colombian survey taken in March 1987 reported that nearly one-half of the population believed that drug traffickers were too powerful to combat. [Ref. 15] Moreover, as mentioned in Chapter II, the extradition process has been beaten. In June 1987, the Colombian Supreme Court nullified the legislation that enabled the government to implement the 1979 extradition treaty. Although the decision was based on the technical grounds that the actual President had not originally signed the enabling legislation, there are some reasons to believe that the mafia's record on murdering and threatening Supreme Court Justices contributed in some degree to the decision. In January 1988, appealing to a multinational convention that the United States and Colombia signed in Montevideo (Uruguay) in 1933, the government issued warrants for the arrest "with the attempt to extradite" of Pablo Escobar. However, the Council of State, Colombia's supreme administrative tribunal, declared the warrants invalid two months later.

The wave of assassination and intimidation, at least those with political motivations against extradition, came to an end when the 1991 constitution finally forbade the extradition of Colombian citizens. Since then, the level of violent drug-related crimes against high level politicians and leading justice officials declined substantially.

Previous examples were clearly aiming toward influencing drug policy issues using what Lee calls "veto by assassination." In addition to that practice, the mafia is also destroying the Colombian judicial system. Judges trying drug trafficking cases are offered death if they convict, or a bribe if they set aside charges. Not surprisingly, few judges opt to convict. During 1987 and 1988, criminal court judges released from jail or dropped charges against four major cocaine dealers: Gilberto Rodriguez Orejuela, Jose Santacruz Londono, Evaristo Porras, and Jorge Luis Ochoa. [Ref. 15] The following statement by Richard Craig [Ref. 16 p.28] clearly reflects the situation that justice system officials and journalists faced in Colombia in the 1980s:

In their defense, many Colombian magistrates and politicians work under a double burden not borne by their U.S. counterparts--extremely low salaries and the very real possibility, if not certainty, of physical elimination should they not "cooperate." When it comes to violence, Colombian *traficantes* stand out in a very violent country. They have raised the practice of intimidation to a shocking, totally unacceptable level. The results have been devastating in both human and political terms, leaving this observer to marvel at the courage of Colombian public officials and journalists.

Other organizations like the police and security agencies had also been touched by threats to their members. A young police officer, whose name I would rather not give, once told me the following story: he was assigned as police inspector of a small "corregimiento" in a relatively "hot" drug area. The day of his arrival and after presenting himself to the civilian authorities and leaders of the small town where his office was located, he received a visit from two unknown individuals. They went directly to the bottom line: We don't want you to visit or send anybody to the surroundings of mi hacienda (ranch) on weekends; during the week there is no problem. In exchange we will pay you this amount monthly. Giving him no time to react, one of them said: by the way how is your wife? We know that she is doing okay in Bogotá with your two little girls. Please send them our respects. What are the alternatives to this man? Should he accept the bribe? Or take the risk? In reality this is a no-win situation, because if he doesn't accept the bribe, his family might be in danger, and if he does accept the bribe, he will be in the trafficker's hands available for further favors, because if he rejects further bribes after receiving money once, they will turn him into higher authority. The last option for him could be to quit and tell his bosses that he won't work in that place. The last seems like a good personal solution but what will happen to the law enforcement system if everyone facing such choices resigns? The conclusion of this story is not relevant to this thesis, but the implications of such practices and the way a

<sup>12</sup> Corregimiento is a small area of land in which the police has jurisdiction. Departments (the equivalent to states) are divided into several municipios (equivalent to counties), and municipios are divided into corregimientos.

human being reacts can help us understand to some extent the motivations that lead to corruption.

# b. Bribery and Penetration

This practice is most commonly used to establish an information network by having accomplices and informants inside law enforcement institutions, in key government ministries (such as Defense, Justice, and Foreign Relations), and in the media. It is also the basis for the development of operation networks throughout the world. Cocaine traffickers buy protection from the police, prosecutors, and, where necessary, the military. Time magazine [Ref. 18] reported in February 1985 that at least one hundred Colombian Air Force personnel and 200 National Policemen had been discharged because of their drug connections. Also 400 judges reportedly were under investigation by the Colombian Attorney General's office on alleged involvement in the drug trade.

In April 1988, the intelligence officer of the Colombian Army's Fourth Brigade stationed in Medellin was dismissed because of proven contacts with the cartels. Medellin was the "drug center" in the 1980s and early 1990s. Although Army troops were not directly engaged in the anti-drug campaign, the Brigade Commander, an Army General, is the person responsible for the overall "public order" in the jurisdiction; therefore, he exerts operational command over all government forces such as the police and the administrative of the Department of Security in the area. This explains why the drug cartels tried to influence one of the most important staff members of the Brigade Commander. Similar cases were (are) spread out all over the country. Such extensive penetration of the state organizations is the way cartels protect their operations. They have also been able to develop an excellent warning system to avoid or anticipate raids on laboratories, police dragnets, and other operations against their industry.

Bribes have been used when leading traffickers are arrested, on some occasions to buy their way out of custody on the spot, or to get out of jail. An example of the former happened when a car carrying Pablo Escobar was stopped at a police checkpoint near Medellin in November 1986. In that episode, Escobar managed to buy his freedom with a bribe of \$250,000 to \$350,000. (Officials held Escobar's wife, who was traveling with him,

until the money was paid). [Ref. 15] One of the most extraordinary cases of bribing an official to escape from jail occurred in the Modelo Prison in Bogotá. Juan Manual Mata Ballesteros, one of Latin America's most notorious drug traffickers, escaped from prison by paying a large bribe to 18 guards. Matta was given the key to his own cell and walked through seven unlocked jail doors to freedom. "God opened the doors for me," the trafficker commented after the escape. [Ref. 17]

This kind of bribery is still very common in Colombia. Low salaries in law enforcement agencies, even after good adjustments made in the government of President Cesar Gaviria Trujillo (1990-1994), encourage bribery, and the "culture" has developed over the years regarding "dinero facil" (easy money).

### IV. DATA COLLECTION AND UTILIZATION

This chapter explains the information used to conduct the analysis. It also describes how that information was collected and how it is used to establish the relationship between the action against illegal drugs and the level of official corruption in Colombia. The chapter is in three sections: Colombia's Department of Defense budget, the anti-drug action curve, and measuring corruption. The section on Colombia's defense budget includes information about the overall budget, the participation of the police and the military forces in the total amount, and the defense budget as a percentage of the national budget. Section B describes the development of the "anti-drug" action curve, which is the result of a combination of the Colombian defense budget from 1985 to 1995 and the level of commitment (motivation and policy) of each government during special events related to illicit drug activities. Section C explains the information collected to measure corruption. The analysis is based on the number of articles related to Colombia, illegal drugs, and corruption published by Colombia's newspaper *EL TIEMPO* and by *THE ECONOMIST* magazine. The main objective of this chapter is to organize the available data in a way that allows us to perform the desired analysis.

#### A. COLOMBIA'S MINISTRY OF DEFENSE BUDGET

Before going through the Ministry of Defense budget, it is important to understand its basic organization, and how its mission is related to the war on illegal drugs.

## 1. Mission and Organization

The ministry of Defense mission is: advise the Colombian President about policy for the Public Force direction and execute policies in order to preserve the national sovereignty. Why is the Defense ministry engaged in illegal drug actions? The answer is simple. If the President or the Congress establish drug trafficking as a national security issue, which is currently the case, then it becomes a task for the Defense ministry. Also, because the national Police is under the Defense Ministry organization, (See Figure 1) and its mission is to preserve the public order, the burden of the Defense Ministry in internal matters is even larger.

The concept of a Defense Ministry highly involved in internal matters differs from the traditional role of similar organizations in most countries. This situation can be explained because in Colombia the main concern is the internal situation. The government faces two big threats in this sector: the guerrillas and the illegal drug trafficking.

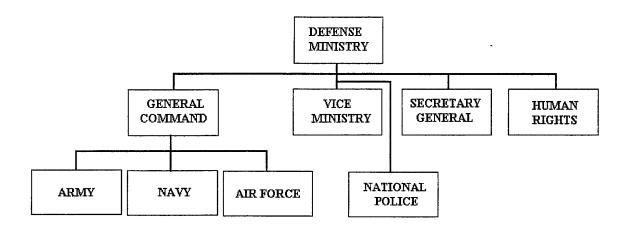


Figure 1. Defense Ministry Organization

Regarding external security, the military forces are small but capable of exerting a limited dissuasion effect to probable aggressors. The relationship with neighboring countries is good. The only problems are minor border disputes with Venezuela and Nicaragua which are being addressed in diplomatic terms. The Police in Colombia is in charge of the war on drugs; the Army, the Navy, and the Air Force provide support and are engaged in large operations. The Police is national, meaning that all policemen fall under the same organization (same overall budget), and the command structure is hierarchical like the military forces.

# 2. Defense Budget

The Defense budget is signed by the President and authorized by Congress. The total budget for the public force for 1995 was 1,812,269 millions of pesos (some U.S. \$2,015 million), divided among the following agencies and/or groups: Defense Minister staff, General Command (similar to the U.S. Joint Chief of Staff), Army, Navy, Air Force, Satena (government air service to national territories<sup>13</sup>), Military University, Police Commissioner, which was created in 1993 to control and supervise violation of human rights and abuses by the police, and the National Police. Table 2 shows the distribution of the budget among these agencies in 1994 and 1995. Note that the Police receives almost half of the total amount. The Army, the Navy, and the Air Force have also a big share.

| AGENCY               | 1994      | 1995      |  |  |
|----------------------|-----------|-----------|--|--|
| Ministry staff       | 149,858   | 204,591   |  |  |
| General Command      | 10,506    | 18,810    |  |  |
| Army                 | 386,375   | 502,096   |  |  |
| Navy                 | 102,226   | 138,564   |  |  |
| Air Force            | 10,796    | 155,939   |  |  |
| Satena               | 1,600     | 1,963     |  |  |
| Military University  | 2,524     | 4,317     |  |  |
| Superintendent. Int. | 1,691     | 2,647     |  |  |
| Police Commissioner  |           | 7,104     |  |  |
| Police               | 530,626   | 776,238   |  |  |
| Total                | 1,296,201 | 1,812,269 |  |  |

Table 2. Defense Budget by Agencies, 1994 and 1995 (Millions of Pesos)

Table 3 is a summary of the Defense budget from 1985 to 1995 divided by functional areas such as personnel services, general expenditures, transfers, and investment. It also

National territories (territorios nacionales) are parts of the country with access difficulties. The government air service helps growers and rural people to move goods to markets.

includes the total national budget and the defense expenditures as a percent of the total budget.

| YEAR | Personnel<br>Services | General<br>Expendit. | Transfers | Investment TOTAL BUDGET |           | National<br>Budget | Percentage<br>N. Budget |  |
|------|-----------------------|----------------------|-----------|-------------------------|-----------|--------------------|-------------------------|--|
| 1985 | 48,904                | 13,040               | 24,561    | 15,897                  | 102,402   | 696,612            | 14.70%                  |  |
| 1986 | 65,300                | 11,940               | 30,319    | 24,627                  | 132,186   | 976,263            | 13.54%                  |  |
| 1987 | 85,674                | 19,216               | 39,622    | 30,675                  | 175,187   | 1,246,882          | 14.05%                  |  |
| 1988 | 114,408               | 28,924               | 50,935    | 57.084                  | 251,351   | 1,688,052          | 14.89%                  |  |
| 1989 | 148,498               | 31,015               | 59,698    | 86.451                  | 325,662   | 2,290,169          | 14.22%                  |  |
| 1990 | 195,199               | 41,861               | 29,841    | 100,238                 | 367,139   | 3,132,585          | 11.72%                  |  |
| 1991 | 252,602               | 83,905               | 61,269    | 70.155                  | 467,931   | 4,369,104          | 10.71%                  |  |
| 1992 | 363,497               | 132,012              | 84,349    | 121,879                 | 701,737   | 5,118,432          | 13.71%                  |  |
| 1993 | 514,492               | 256,903              | 120,733   | 212,164                 | 1,104,292 | 6,696,737          | 16.49%                  |  |
| 1994 | 744,539               | 252,231              | 188,300   | 111,131                 | 1,296,201 | 10,110,772         | 12.82%                  |  |
| 1995 | 997,122               | 302,937              | 341,988   | 170,222                 | 1,812,269 | 12,591,667         | 14.39%                  |  |

Source: La Fuerza Publica en Cifras, (The Public Force in Numbers), Colombian Defense Ministry, bulletin No. 2, April 1995. (Figures are not adjusted for inflation)

Table 3. Defense Budget, 1985-1995 (Millions of Pesos)

To establish the pattern of the budget from 1985 to 1995, it is necessary to adjust it for inflation. Table 4 contains the overall Defense and the National Police budget adjusted to 1995 Colombian pesos. The table also includes both budgets as a percentage of the total National budget. Figure 2 is the defense budget from 1985 to 1995 adjusted for inflation. Figure 3 is the police budget from 1985 to 1995 adjusted for inflation.

Since the National Police is the organization with the highest burden both in the defense budget and in the action against illegal drugs, its budget in real 1995 Colombian pesos will give a good measure of the evolution and trend of the resources devoted to reduce the drug trafficking problem.

| YEAR | Defense Budget | Defense Budget<br>% National | National Police<br>Budget | National Police<br>% National |  |
|------|----------------|------------------------------|---------------------------|-------------------------------|--|
| 1985 | 944,556.50     | 14.70%                       | 407,608.70                | 6.34%                         |  |
| 1986 | 995,334.00     | 13.54%                       | 407,505.20                | 5.54%                         |  |
| 1987 | 1,090,184.00   | 14.05%                       | 465,074.00                | 5.99%                         |  |
| 1988 | 1,261,412.00   | 14.89%                       | 482,867.70                | 5.70%                         |  |
| 1989 | 1,275,834.00   | 14.22%                       | 491,196.70                | 5.47%                         |  |
| 1990 | 1,140,624.00   | 11.72%                       | 408,710.90                | 4.20%                         |  |
| 1991 | 1,098,009.00   | 10.71%                       | 427,667.20                | 4.17%                         |  |
| 1992 | 1,298,612.00   | 13.71%                       | 500,478.50                | 5.28%                         |  |
| 1993 | 1,633,155.00   | 16.49%                       | 597,529.30                | 6.03%                         |  |
| 1994 | 1,563,089.00   | 12.82%                       | 639,881.90                | 5.25%                         |  |
| 1995 | 1,812,269.00   | 14.39%                       | 776,238.00                | 6.16%                         |  |

Source: La Fuerza Publica en Cifras, (The Public Force in Numbers), Colombian Defense Ministry, bulletin No. 2, April 1995. (Figures are adjusted for inflation)

Table 4. Defense and Police Budget, 1985-1995 (In Constant 1995 Pesos)

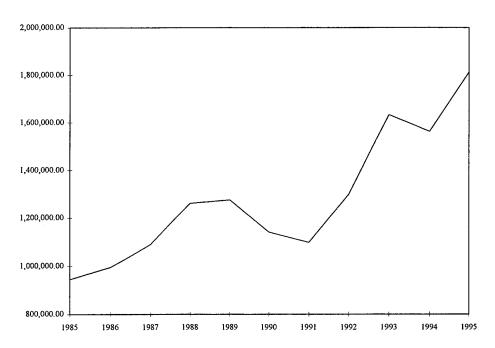


Figure 2. Defense Budget 1985-1995 (Adjusted for Inflation)

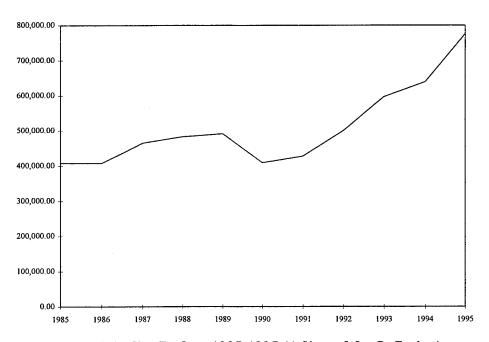


Figure 3. Police Budget 1985-1995 (Adjusted for Inflation)

#### B. THE ANTI-DRUG ACTION CURVE

Section B of Chapter II describes the main shifts of the Colombian anti-drug policy, and the reasons for each change. The main points of change were two: first, budget allocation and second, the level of commitment of the governments to take action against drug trafficker organizations and against the illegal trade itself. To measure the real efforts against illegal drug trafficking, it is necessary to develop an "anti-drug" action curve that captures both budget and commitment. The budget, explained in Section A of this chapter, is an easy measure that can be found in official records. The level of commitment is a subjective measure that can be derived from important policy actions and national events. From 1985 to 1995, the level of commitment can be divided into four categories: low, medium, high, and very high. Each level contributed in different percentages to the overall "anti-drug action" curve over the years. Those different levels are summarized in the commitment level curve. See Figure 4 and Table 5.

The "anti-drug" action curve developed in this thesis is an attempt to capture the real commitment of the Colombian government to fight the war on drugs in the selected period of time. Most of the research in this area concentrates on budget, and establishes a level of commitment by the amount of money expended in such actions. While this is a real measure, most of the times it fails to explain the behavior and real motives that countries like Colombia have to increase or reduce their efforts. To understand this concept, let's take the example of a soccer team: during the first half, the team has no concentration and everything seems to be not working at all. The other team starts screaming "you look ridiculous, you should be playing in a less competitive league," and other similar things; suddenly the team starts playing better, regains concentration and realizes that they were capable of beating the other team. In this case their self-esteem and their motivation was enhanced by a specific situation. Note that the money invested in their training and equipment didn't change, but their performance did. To develop a curve that closely represents the real anti-drug action,

it is necessary to combine the budget figures with the commitment curve. The following subsections describe those curves.

# 1. Commitment Level Curve

The level of motivation and commitment has an important impact in the overall action against illegal drugs. The government has a plan, and devotes resources to accomplish it, but there are events that trigger the real commitment against illegal drug trafficking and boost the motivation of law enforcement agencies to act effectively.

| DATE        | EVENT  | LEVEL     | %  |
|-------------|--|-----------|----|
| April 1984  | Assassination of Justice Minister Rodrigo<br>Lara Bonilla. President Betancur declared<br>"war without quarter" against drug dealers.  | High      | 30 |
| August 1986 | President Virgilio Barco took office.  | Medium    | 20 |
| Dec. 1987   | President Barco declared "state of siege"in response to violence.  | High      | 30 |
| August 1989 | Assassination of Presidential candidate Luis Carlos Galan and other three candidates.  | Very High | 50 |
| August 1990 | President Cesar Gaviria took office and started a submission to justice policy to drug traffickers, offering reductions of judicial penalties if they turned in voluntarily. | Medium    | 20 |
| Dec. 1991   | New Constitution is signed.  | Medium    | 20 |
| July 1992   | Drug dealer Pablo Escobar escaped from jail.   | Very High | 50 |
| Dec. 1993   | The Police killed drug dealer Pablo Escobar.   | Medium    | 20 |
| August 1994 | President Ernesto Samper took office and started a frontal attack against illegal drugs.   | Very High | 50 |

Table 5. Summary of the Commitment Curve

Based on observation and noting the effect that particular events exerted in the level of commitment and motivation to act against drugs, a good approximation is to assign the following percentages to each level:

• Low level 10%

• Medium level 20%

• High level 30%

• Very High 50%

These percentages are to be applied to the budget figures in the corresponding time frames in order to obtain the "anti-drug" action curve. For example, if the National Police budget for 1995 is 776,238 pesos, and the level of commitment is very high, the associated value on the "anti-drug" action curve will be 776,238×0.5 units of action.

The main events and policy actions used to construct the commitment curve are summarized in Table 5. For details see Colombian Drug Policy in Section B Chapter II.

### 2. Budget Curve

As stated before, of all the budget figures described in the previous section, the National Police budget in real pesos is the one that represents more accurately the amount of resources devoted to reducing illicit drug activities. Since the figures are in real pesos, they capture the different levels of effort (assuming that the effort is directly related to the budget) of the government against illegal drug trafficking. Of course there are many other variables such as the Department of Justice budget and the military and many other agencies involved in the general effort, but since the Police has the highest burden, both, in the anti-drug action and in the anti-drug budget, it is the one used in this analysis. This curve is the second component of the "anti-drug" action curve. (Figure 5)

To obtain the final "anti-drug" action curve we multiply the values of the National Police budget in real pesos times the different levels of commitment described in the commitment curve. This curve represents the Colombian Government level of effort against illegal drugs and will be treated as the independent variable to identify the relationship between the effort and the level of official corruption in Colombia. Section C explains how corruption is measured in the context of this paper, and the sources of information.

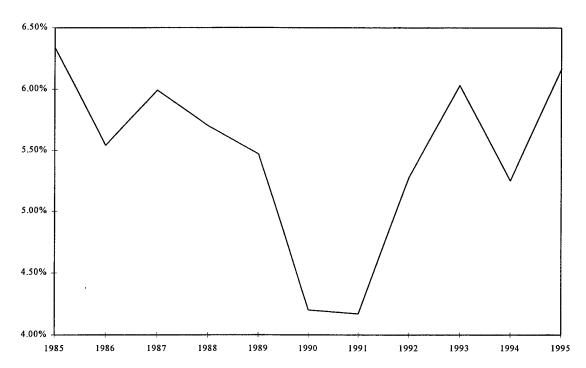


Figure 4. National Police Budget Curve as a Percentage of National Budget

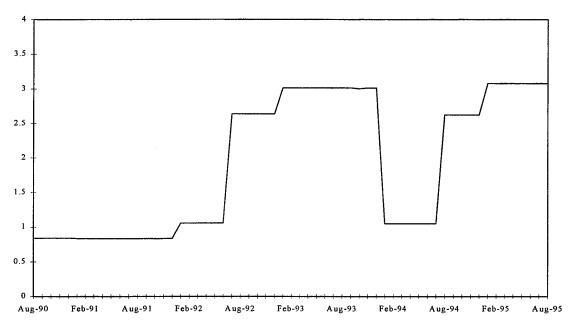


Figure 5. Anti-Drug Action Curve, 1990-1995

### C. MEASURING CORRUPTION

Measuring corruption is not an easy task. Some of the most common ways to measure corruption are: the number of officials convicted on corruption charges; illegal enrichment by government officials; impact of political campaign contributions by interest groups or individuals; and surveys. All are valid and somehow the result of common sense thinking. Unfortunately, corruption is a very complex behavior that cannot be explained with a single method or variable; therefore, I must make clear that the present research is only a small step in the long road to understand the scope and depth of the problem. Going back to the different methods, if we measure the level of corruption as a direct function of the number of officials convicted, what if the law enforcement agencies are doing a better job? In this case, more corrupt officials will be convicted but not because of an increase in corrupt practices. The number will increase because law enforcement agencies will arrest more people as a consequence of better techniques, more resources, and training. Also if law enforcement institutions are corrupt themselves, how could you be assured that the measured level of corruption is accurate? Finding the weaknesses of each approach could be endless due to the many factors involved in the problem. The important point is to recognize that there is no such perfect unit of measure of corruption, and that every small step in the right direction will contribute positively in the overall effort to develop a model that helps people understand the phenomena.

To represent the level and trend of official corruption in Colombia, a social research technique is used. The data is the number of articles related to official corruption published by two important publications. The purpose is to capture the general sense that society has regarding the problem and to use this sense as a proxy for the size of the problem. The number of articles represent general perception of an issue because credible newspapers and magazines attempt to inform the public on general interest aspects. For example, if there is a terrorist group exploding bombs in malls and supermarkets, most likely local and national newspapers and magazines will include articles regarding the terrorist actions. In the same

fashion, if the level of corruption is high (i.e. judges being bribed), the media will inform people, and will also conduct their own investigations to unveil corruption problems. As stated before, this is by no means a perfect approach, but the logic behind it is good and will provide a new perspective to look at the problem.

The two sources of information are: the Colombian newspaper *El Tiempo*, and the magazine *The Economist*. Both are prestigious publications with no apparent bias regarding illegal drug trafficking or corruption in Colombia.

# 1. Colombia's Newspaper El Tiempo

El Tiempo was selected for two reasons: first, it is the most prestigious daily newspaper in Colombia, and second, because even with liberal<sup>14</sup> ideas, the editorial board has maintained a high level of impartiality regarding political issues.

The data was collected in Bogotá by Mrs Claudia Beltran during September 1995, and includes all the articles published by the newspaper regarding official corruption between August 1990 and August 1995. The list of the articles with date, headline, and page is included in Appendix A. Table 6 contain the number of articles by month. This data is used as the dependent variable in the analysis chapter, in an attempt, as mentioned before, to establish if there is a relationship between the "anti-drug" action curve and this measure of corruption.

#### 2. The Economist

The Economist was selected because of its world wide prestige, and the sense that when The Economist publishes something, something is really happening, especially when it publishes an article on countries like Colombia. The data from The Economist was collected with the help of the electronic resources section in the Dudley Knox Library at the Naval Postgraduate School, and includes all articles published by that magazine regarding Colombia, and related to official corruption since January 1985. This data is used also as a

The liberal party is the biggest political party in Colombia. The last three Presidents have been liberals, and the newspaper supports that ideology. The Liberal party was officially established in 1850. The main ideas were a lessened executive power; separation of church and state; freedom of press, education, religion, and business; and elimination of the death penalty. [Ref. 1]

dependent variable in the analysis with the additional purpose to establish if there is a relationship to the newspaper *El Tiempo* in terms of trend. Table 7 contains the number of articles published by this magazine.

|           | YEAR |      |      |      |      |      |  |
|-----------|------|------|------|------|------|------|--|
| MONTH     | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 |  |
| January   |      | 0    | 5    | 9    | 5    | 10   |  |
| February  |      | 3    | 7    | 3    | 4    | 9    |  |
| March     |      | 7    | 8    | 9    | 5    | 9    |  |
| April     |      | 8    | 3    | 10   | 7    | 11   |  |
| May       |      | 6    | 8    | 8    | 5    | 11   |  |
| June      |      | 6    | 7    | 9    | 3    | 12   |  |
| July      |      | 5    | 6    | 10   | 10   | 13   |  |
| August    | 2    | 4    | 9    | 19   | 11   | 9    |  |
| September | 10   | 11   | 9    | 5    | 3    |      |  |
| October   | 3    | 7    | 11   | 6    | 10   |      |  |
| November  | 9    | 4    | 12   | 7    | 5    |      |  |
| December  | 3    | 1    | 8    | 8    | 8    |      |  |
| Total     | 27   | 62   | 93   | 103  | 76   | 84   |  |

Table 6. Number of Articles on Corruption of Colombian Government Officials Published by *El Tiempo* (1990-1995)

#### D. SUMMARY

In summary, from the information described in this chapter, the following sets of data (three) are used in the analysis: the "anti-drug" action curve, which is a combination of the Colombian National Police budget in real pesos, and the commitment level curve described in Section B of this chapter; the number of articles regarding official corruption published by Colombia's newspaper *El Tiempo* from August 1990 to August 1995; and

the number of articles on the same topic published by *The Economist* magazine from January 1985 to September 1995. The following chapter (analysis), explains how the information is used, the sequence of the analysis, and the results.

|           |      | YEAR |      |      |      |      |      |      |      |      |      |
|-----------|------|------|------|------|------|------|------|------|------|------|------|
| MONTH     | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 |
| January   |      | 1    | 1    | 2    | 1    | 2    | 1    | 1    | 1    |      | 3    |
| February  | 1    |      |      | 1    |      |      |      |      | 1    |      | 2    |
| March     |      |      |      |      | 1    | 2    | 2    |      | 1    |      |      |
| April     | 1    |      | 1    | 1    | 2    |      |      | 1    | 1    | 1    | 1    |
| May       | 1    | 1    |      | 2    |      | 1    |      | 2    |      |      | 3    |
| June      |      |      |      | 1    | 1    | 1    | 1    | 1    |      |      | 4    |
| July      |      |      |      |      |      | 2    | 1    |      |      | 1    | 1    |
| August    |      |      | 2    | 3    | 1    | 1    | 1    | 1    | 2    |      | 6    |
| September |      |      |      | 1    | 12   |      | 1    |      | 1    |      | 1    |
| October   |      |      | 1    | 2    | 2    |      |      |      |      | 2    |      |
| November  | 1    |      | 1    |      |      | 2    |      |      | 2    |      |      |
| December  |      |      |      | 1    | 2    | 2    |      |      | 2    | 1    |      |
| Total     | 4    | 2    | 6    | 14   | 22   | 13   | 7    | 6    | 11   | 5    | 21   |

Table 7. Number of Articles on Corruption of Colombian Government Officials Published by *Economist* (1985-1995)

#### V. DATA ANALYSIS AND INTERPRETATION

This chapter explains the sequence and the methodology used in the analysis of the data presented in Chapter IV. It also contains a section with statistical definitions and concepts, the results of the analysis, and their interpretation in an attempt to answer the basic research question of the thesis: is there a relationship between the war on drugs and official corruption in Colombia? The data analysis is conducted in the following sequence:

- Compare the information on the number of articles published by *El Tiempo* and by *The Economist* to find if they are correlated. In Chapter IV the data from *El Tiempo* is from 1990 to 1995, and the data from *The Economist* is from 1985 to 1995. If in fact there is a correlation then, the measure of the level of corruption using *The Economist* could be used for the ten-year period.
- Run a regression using the number of articles published by *El Tiempo* (level of corruption) as the dependent variable against the "anti-drug" action curve developed in the previous chapter and analyze the results.
- Run a regression using the number of articles published by *The Economist* (level of corruption) as the dependent variable against the "anti-drug" action curve and analyze the results.
- Compare and interpret the results.

Before going through the analysis section, it is important to clarify some statistical definitions and concepts used in the analysis. Section A includes important definitions and a review of the statistical concepts used in the analysis.

#### A. STATISTICAL CONCEPTS AND DEFINITIONS

This section discusses the fundamental concepts and elements of regression analysis used in the analysis of the corruption data. This section is not an attempt to provide detailed information about the topic of regression analysis, but to clarify important concepts and definitions to help non-statistical-oriented readers to understand the terminology and concepts used in Section B. This section is divided in four parts: definition of a regression model; measures of goodness of fit; statistical significance of a regression line; and residual analysis.

Concepts and definitions are from an unpublished manuscript by Professor Shu S. Liao. [Ref. 20]

# 1. Regression Model

Regression is a technique of quantifying relationships between two or more variables. It is concerned with the problem of explaining or estimating the value of one variable, generally called the dependent variable (Y), on the basis of one or more other variables (X), called explanatory or independent variables. Regression is one of the most widely used quantitative techniques in business and governmental organizations because of the many issues faced by managers involving the extent of one variable's relationship to another. Another common application for regression is to explain the effect of a government policy on a society, which is the case outlined in this thesis. Our model will attempt to explain the relationship between the war on drugs (government actions) and the level of official corruption in Colombia. For this case, the regression model will reveal how these variables are correlated, and the true effect or impact of government action on the level of official corruption. The general form of a simple regression equation is:

$$Y_c = a + bX \tag{1}$$

Where  $Y_c$  represents the estimated amount for the dependent variable and X is the value of the independent variable. The coefficients a and b represent the constant and the slope of the curve respectively.

Regression models are built from a well-defined set of assumptions. First, the dependent variable is linearly related to the explanatory variable. Second, the error terms of a properly conducted regression analysis should be normally distributed. Third, the error terms are assumed to have a finite variance; that is constant for all given values of the independent variable (homoscedasticity). Fourth, the error terms are assumed to have a mean of zero. Fifth, the error terms are assumed to be independent of each other.

### 2. Measures of Goodness of Fit

Since a regression equation represents the average relationship between the dependent variable and the independent variable, in most models random deviations are inevitable. It is rather unlikely that the "best-fitting" straight line will go through all points observed. In reality, most of the observations will lie above or below the regression line. The goal of the least squares method<sup>15</sup> is to find the "best-fitting" line that passes close to all the data points. The most commonly used measures of goodness of fit are the standard error of estimate, the coefficient of correlation, and the coefficient of determination.

# a. Standard Error of Estimate

The standard error of the estimate is computed similarly to the standard deviation in descriptive statistics. The standard error is a measurement of the typical vertical distance from the sample data points to the regression line. If the error terms are normally distributed around the regression line, the standard error of estimate can be used to examine the dispersion of data points around the regression line and assess the goodness of fit of the model.

The value of *Se* may be interpreted like the sample standard deviation in a normal distribution, i.e., given that the assumptions of regression hold, approximately 68 percent of the observed values will fall within 1.0 *Se* of the regression line. 90 percent will fall within 1.64 *Se* of the line, and 95 percent will fall within 2.0 *Se* of the line. This measure is particularly useful to managers in the selection of data points outside of a desired range.

#### b. Coefficient of Correlation

Another measure of the goodness of fit of a regression model is the coefficient of correlation, which provides a relative measure of the relationship between the dependent and the independent variable. If there is a perfect relationship between the dependent variable and the independent variable, no error term exists, the standard error of the estimate would be zero (Se = 0), and the coefficient of correlation will be one. The

The least squares method is used to locate the regression line. It determines the values of a and b so that the sum of the squared deviations between the observations and the fitted line is less than that from any other straight line that could be fitted through the observations. [Ref. 20]

coefficient of correlation is always between zero and one and is calculated as the squared root of one minus the ratio of standard error of estimate squared over the standard error of the dependent variable squared.

$$R = \sqrt{1 - \frac{S_e^2}{S_y^2}}$$
 (2)

In summary, the coefficient of correlation measures the degree of dispersion. A low coefficient of correlation means high dispersion. The coefficient is represented by the letter R.

# c. Coefficient of Determination

Although the coefficient of correlation is a good measure of the goodness of fit of the regression line, its value is not intuitively meaningful. The coefficient of determination  $R^2$  provides more meaning.  $R^2$  or the coefficient of determination is very easy to interpret. For example, if R = 0.8,  $R^2 = 0.64$ , which means that 64 percent of the sample variation from the mean of the dependent variable can be explained by the change in the independent variable in the regression equation in question. This interpretation can be explained algebraically but since this is not intended to be a statistical text, those proofs are not included. Interested readers are encouraged to consult statistical textbooks or Ref. 20 of this thesis.

## 3. Statistical Significance of the Regression Line

The statistical significance of a regression line is used to determine whether knowledge of the independent variable X is really useful in predicting the values of the dependent variable Y. For this analysis, the coefficient b (slope) of the regression equation is of primary interest. For example, if there is no relationship between the independent and dependent variable, the slope of the true regression line would be zero, i.e., the true regression line must be a horizontal straight line and the predicted value of the dependent

variable  $Y_c$  is equal to the mean of the sample values. Since  $Y_c$  is a constant for any value of X whenever the slope of the line is not significantly different from zero, the values of X are of no use in predicting the values of Y. Conversely, if the slope is significantly different from zero, then the values of X are meaningful in predicting the values of Y. The "t-test" and "f-test" are the most commonly methods used to evaluate the statistical significance of the regression equation.

#### a. T-test

The t-test is used to determine if the value of a slope, b, is significantly different from zero. To do this, it is necessary to determine the standard error of the b coefficient. The "t-ratio" then, is defined as the value of the slope b divided by its standard error. This statistic is sometimes referred to as the number of standard errors of the regression coefficient. [Ref. 20] For example, a t-ratio of five indicates that the value of the slope in the regression is five standard errors from zero.

Since the aim of this method is to determine if the slope, b, is significantly different from zero, the higher the t-value, the more unlikely that the b coefficient is a random variation from zero. In other words, a high t-value indicates that the independent variable is important in explaining the value of the dependent variable. Generally, t-values greater than 2.0 are desired except when the sample size is small. [Ref. 20]

The statistical significance of the constant term a is also verified with a t-ratio, and its interpretation is similar to that of the coefficient b. All t-values are followed by a p-value which represents the probability of error.

#### b. F-test

According to S. Liao [Ref. 20], the f-test is another way of testing the null hypothesis that the slope of the true regression line is equal to zero (i.e., b is simply a random deviation from 0). This test uses the measures of unexplained and explained variation. The total variation in Y equals the sum of explained variation and unexplained variation. In general terms, the f-value is calculated by dividing the mean squares of the regression by

Mean square is a sum of squares divided by its degree of freedom.

the mean squares of the error. This value is equivalent to the t-ratio squared when there is only one independent variable in the model.

The most significant use of the f-test in regression analysis is to check the statistical significance of  $R^2$ . For example, if we have an  $R^2$  of 95%, the statistical significance of the model is not a question. But in real life situations results like that are rare. In a real case, the f-test plays an important role. As in the t-test, the higher the f-ratio, the more unlikely that the b coefficient is a random deviation from zero. As mentioned earlier,  $R^2$  represents the proportion of total variation in Y that is explained by the regression equation. Therefore, it is very important to know its statistical significance.

## 4. Residual Analysis

The error terms represent the difference between the actual or observed values of the dependent variable Y, and its projected values  $Y_c$ . Residual terms analysis is a powerful tool to check the validity of the regression model. One of the easiest ways to analyze the residuals is plotting them in different ways. The most common plots are: The normal probability plot, the residual (e) vs. Fit  $(Y_c)$  plot, the time series plot, and the residual vs. explanatory variable plot. Following is a brief description of the characteristics of each one, and how they are used.

## a. Normal Probability Plot

In this case, we plot the error terms against the equivalent normal scores. Since the distribution of the error terms in a good regression model is expected to be random or close to random (no apparent pattern out of consideration), this plot's desired shape is a 45 % straight line. The straightness of the normal probability distribution of the error terms can be measured by the coefficient of correlation *R*.

#### b. Residual vs Fit Plot

This plot allows us to find violations to the homoscedasticity and linearity assumptions. The residual vs. fit plot removes the effect of the regression line and amplifies any existing pattern in the error terms. If we find no pattern, this means that the two assumptions are being met. Conversely, if a pattern is obvious in the plot, the regression model is missing an important variable or the variable is not in the appropriate form.

#### c. Time Series Plot

In this plot, the observations are plotted in sequence. This plot will have meaning only when the data is collected or can be arranged in a manner involving time. It is intended to show how consecutive data points relate to each other.

## d. Residual vs. Explanatory Variable Plot

The purpose of this plot is to see if a curvilinear relationship exists between the residuals and any particular explanatory variable. The correct sequence is to look at the residual vs. Fit plot; if there is no curvilinear pattern in that plot, there is no need to conduct the plot against the explanatory variables. On the other hand, if there is such pattern, the correct step is to plot the residuals against all explanatory variables to find the one that is causing the problem.

In addition to the residual analysis techniques and the other measures to evaluate the significance of a regression model, is important to mention the lack-of-fit and the Durbin-Watson tests. The lack-of-fit test uses the F-statistic. If the F is insignificant, this means that the relationship between the dependent variable and the explanatory variable is linear. Otherwise, the relationship is curvilinear. The Durbin-Watson test is a summary measure of the serial correlation in the error terms. With uncorrelated errors, the Durbin-Watson statistic has values close to two. If the errors are perfectly and positively correlated, the value will be zero, and for perfectly negatively correlated errors the value is four. [Ref. 20]

#### B. DATA ANALYSIS

The statistical analysis is conducted using the MINITAB software package available in the Systems Management Department computer laboratory.

## 1. Relationship Between El Tiempo and The Economist

To find out if there is a significant relationship between the number of articles published by the newspaper *El Tiempo* and *The Economist* magazine it is necessary to use regression techniques. The simple correlation coefficient between the two sets of data is 0.295.

The regression output using *The Economist* data as the dependent variable, and *El Tiempo* as the independent variable also produced very poor results. *LEVEL1* is the level of corruption measured by the number of articles published by *El Tiempo*, and *LEVEL2* refers to the level of corruption using *The Economist* data.

The regression equation is:

$$LEVEL2 = 0.158 + 0.0997 \ LEVEL1.$$
 (3)

| Predictor | Coefficient | Coefficient Standard Deviation t-ra |      | р     |
|-----------|-------------|-------------------------------------|------|-------|
| Constant  | 0.1579      | 0.3379                              | 0.47 | 0.642 |
| LEVELI    | 0.09970     | 0.04211                             | 2.37 | 0.021 |

s = 1.100  $R^2 = 8.7\%$   $R^2 \text{ (adj)} = 7.1\%$ 

## Analysis of Variance:

| Source     | DF | SS     | MS    | F    | р     |
|------------|----|--------|-------|------|-------|
| Regression | 1  | 6.786  | 6.786 | 5.61 | 0.021 |
| Error      | 59 | 71.410 | 1.210 |      |       |
| Total      | 60 | 78.197 |       |      |       |

## **Unusual Observations:**

| Observation | <i>LEVEL1</i> | LEVEL2 | Fit   | Standard<br>Deviation<br>Fit | Residual | St. Residual       |
|-------------|---------------|--------|-------|------------------------------|----------|--------------------|
| 37          | 19.0          | 2.000  | 2.052 | 0.513                        | -0.052   | -0.05 <sup>x</sup> |
| 59          | 12.0          | 4.000  | 1.354 | 0.243                        | 2.646    | 2.47 <sup>R</sup>  |
| 61          | 9.0           | 6.000  | 1.055 | 0.158                        | 4.945    | 4.54 <sup>R</sup>  |

<sup>&</sup>lt;sup>R</sup> denotes an observation with a large standard residual.

From the results, we can say that the two levels are not highly correlated. Although the t-ratio for LEVEL1 is not that bad, the  $R^2$  is only 8.7 percent, indicating that their level

<sup>&</sup>lt;sup>X</sup> denotes an observation whose X value gives it large influence.

of correlation is very low. This result may be useful in some cases depending on the specific use, but in this case that is not true; the purpose was to use *LEVEL2* (corruption using *The Economist*) to replace *LEVEL1* (corruption using *El Tiempo*) in the ten-year analysis. The lack of correlation between these two sets of data can be explained by two factors. First, the number of articles published by *The Economist* is very low, having a large number of zeros if we use months as a time frame. (Months is the time base for the data in the newspaper *El Tiempo*) These zeros generate errors in the mathematical computations used to conduct the regression, thus making it difficult to find the relationship. Second, *The Economist* is a worldwide publication that places its emphasis on industrialized countries and events of world interest. Colombia is a small country in the international context, and even though illegal drug trafficking is considered as a priority in these times, is difficult to relate the level of official corruption in Colombia with the number of articles published by that world magazine.

## 2. Relationship Between El Tiempo and the Anti-Drug Action Curve

The first step is to define the dependent and the independent variables; then run a simple linear regression between the two to establish their relationship. Since the purpose is to see if the war on drugs, represented here with the anti-drug action curve, has had some impact on the level of official corruption in Colombia, the logic calls for us to use the "anti-drug" action curve as the independent variable and the level of corruption as the dependent variable (*LEVEL1*). Figure 6 is the plot of the two variables.

The regression equation is:

$$LEVEL1 = 4.07 + 0.000015 \ ACCION1.$$
 (4)

| Predictor | Coefficient | Standard Deviation | t-ratio | p     |
|-----------|-------------|--------------------|---------|-------|
| Constant  | 4.0695      | 0.7643             | 5.32    | 0.000 |
| ACCIONI   | 0.00001547  | 0.00000321         | 4.82    | 0.000 |

s = 2.882  $R^2 = 28.2\%$   $R^2 \text{ (adj)} = 27.0\%$ 

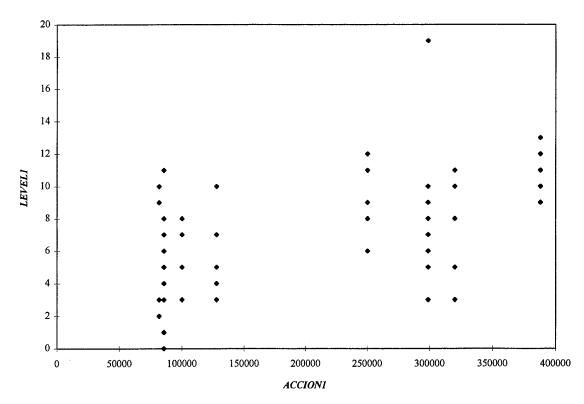


Figure 6. Plot of the Two Variables (LEVEL1 Vs. ACCION1)

## Analysis of Variance:

| Source     | DF | SS     | MS     | F     | р     |
|------------|----|--------|--------|-------|-------|
| Regression | 1  | 192.80 | 192.80 | 23.22 | 0.000 |
| Error      | 59 | 489.89 | 8.30   |       |       |
| Total      | 60 | 682.69 |        |       |       |

The t-ratios for the constant (5.32) and for the explanatory variable *ACCION1* (4.82) are significant. Generally, t-values greater than 2.0 are desired. The high t-ratio value for the independent variable *ACCION1* indicates that the variable (action curve in this case) is important in explaining the value of the level of corruption (*LEVEL1*). The high t-ratio for the constant also indicates that the constant term is important for explaining the relationship. Therefore, it should be kept. The probability of error in this case is less than 0.1 percent.

## Unusual Observations:

| Observation | ACCIONI | LEVEL1 | Fit   | Standard<br>Deviation<br>Fit | Residual | Standard<br>Residual |
|-------------|---------|--------|-------|------------------------------|----------|----------------------|
| 31          | 298765  | 3.000  | 8.690 | 0.469                        | -5.690   | -2.00 <sup>R</sup>   |
| 37          | 298765  | 19.000 | 8.690 | 0.469                        | 10.310   | 3.63 <sup>R</sup>    |
| 50          | 319941  | 3.000  | 9.017 | 0.514                        | -6.017   | -2.12 <sup>R</sup>   |

<sup>&</sup>lt;sup>R</sup> denotes an observation whose X value gives it large influence.

Durbin-Watson statistic = 2.08.

No evidence of lack of fit (P > 0.1)

Pure error test - F = 0.56 P = 0.7629 DF(pure error) = 53

The value of  $R^2$  (coefficient of determination) implies that "28.2 percent of the sample variation from the mean of the level of official corruption can be explained by the change in the anti-drug action curve." The f-ratio is also good, and there is no evidence of lack-of-fit or linear correlation of the error terms. In general, the results of the regression are

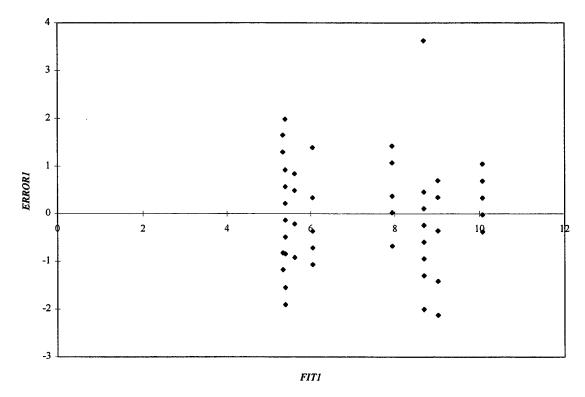


Figure 7. Residual vs. Fit Plot (ERROR1 VS. FIT1)

strong enough to say that the model captures the real relationship between these two variables. Figure 7 is the residual vs. fit plot, and it shows no evident pattern in the

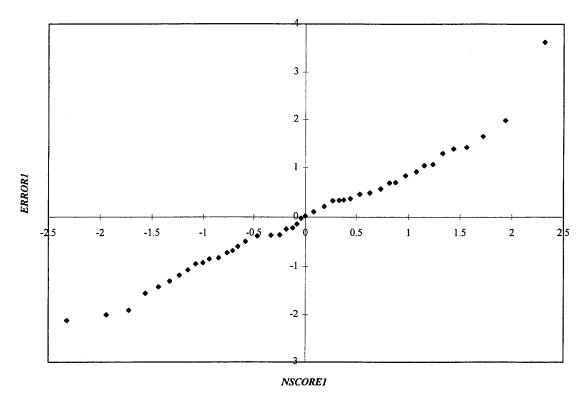


Figure 8. Normal Plot (ERROR1 vs NSCORE1)

distribution of errors, indicating that all the patterns are being captured by the model. Figure 8 is the normal plot. It shows a very good approximation of a straight line, reinforcing the assumption that the error terms are randomly distributed.

As an alternative to the preceding case, the same regression was run without the unusual values. If we adjust data points number 31 (Feb 93), 37 (Aug 93), and 50 (Sept 94) to follow the general trend, the regression results are: the t-ratios are both over 6.0, the f-ratio is significant, and  $R^2$  improved to 39 percent. This means that if we adjust unusual observations to conform with the general trend, the results are better. The question is: how reliable is our adjustment? Which of the two models represents a better fit of the data? Although the last one gives better numbers, the former is reality. Therefore, we will use the original data in the analysis. The data is summarized in Appendix B.

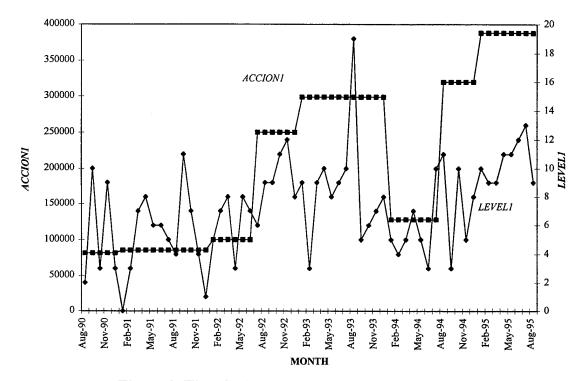


Figure 9. Time Series Plot of LEVEL1 and ACCION1

Figure 9 is a time series plot of the variables' *LEVEL1* and *ACCION1*. In this figure, correlation between the variables can be seen. Although it is not a perfect correlation (as demonstrated before), the two curves follow similar patterns during specific periods.

## 3. Relationship Between The Economist and the Anti-Drug Action Curve

To establish the relationship between the corruption level measured by the number of articles published by *The Economist (LEVEL2)*, additional computations are needed because as we mentioned in Section A of this chapter, the two levels are poorly correlated. The first step is to run a regression using the same time frame as with *El Tiempo*, and with the action curve (ACCIONI) as the independent variable. As expected, the results are poor: the t-ratio for the constant is insignificant, (t-ratio=0.60, p=0.552) and, for the independent variable, is very close to the lower limit (t-ratio=2.85, p=0.006). The  $R^2$  is also low (12.1 percent), and there is evidence of lack of fit due to a possible curvature in the independent

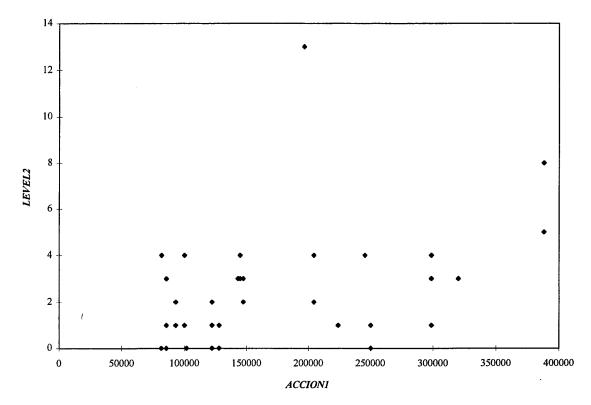


Figure 10. LEVEL2 (Quarterly) and ACCION1 (LEVEL2 vs ACCION1)

variable *ACCION1*. In summary, this model is not a good representation of the relationship. Figure 10 is a scatter plot of *LEVEL2* vs *ACCION1*.

Looking to improvement of the model, the data was arranged on a quarterly basis. The intention was to eliminate the errors introduced by the small number of articles published monthly. The regression then was conducted using the number of articles published by *The Economist* grouped by quarters as the dependent variable, and the "antidrug" action curve (*ACCION1*) as the independent variable.

The regression equation is:

$$LEVEL2 = 0.432 + .000012 ACCION1.$$
 (5)

| Predictor | Coefficient | Standard Deviation t-ratio |      | р     |
|-----------|-------------|----------------------------|------|-------|
| Constant  | 0.4316      | 0.7299                     | 0.59 | 0.558 |
| ACCION1   | 0.00001242  | 0.00000373                 | 3.33 | 0.002 |

$$s = 2.236$$
  $R^2 = 21.3\%$ 

 $R^2$  (adj) = 19.4%

## Analysis of Variance:

| Source     | DF | SS      | MS     | F     | p     |
|------------|----|---------|--------|-------|-------|
| Regression | 1  | 55.479  | 55.479 | 11.10 | 0.002 |
| Error      | 41 | 204.986 | 5.000  |       |       |
| Total      | 42 | 260.465 |        |       |       |

#### Unusual Observations:

| Observation | ACCIONI | LEVEL2 | Fit   | Standard<br>Deviation<br>Fit | Residual | Standard<br>Residual |
|-------------|---------|--------|-------|------------------------------|----------|----------------------|
| 19          | 196479  | 13.000 | 2.873 | 0.352                        | 10.127   | 4.59 <sup>R</sup>    |
| 41          | 388119  | 5.000  | 5.253 | 0.872                        | -0.253   | -0.12 <sup>x</sup>   |
| 42          | 388119  | 8.000  | 5.253 | 0.872                        | 2.747    | 1.33 <sup>x</sup>    |
| 43          | 388119  | 8.000  | 5.253 | 0.872                        | 2.747    | 1.33 <sup>x</sup>    |

<sup>&</sup>lt;sup>R</sup> denotes an observation with a large standard residual.

Durbin-Watson statistic = 1.40.

No evidence of lack of fit (P > 0.1)

Pure error test - F = 7.60 P = 0.0000 DF(pure error) = 23

As we can see from the output, in this form, results are better. In this case, 21.3 percent of the total variation of the corruption level from the mean can be explained by changes in the "anti-drug" action curve. Figure 11 is the residual vs. Fit plot. Although it is difficult to find a pattern in the plot, it does not look as random as the residual vs. Fit plot using the information from the *El Tiempo*. There is a slight indication of curvature in the error terms from 2.80 in the fit axis. Figure 12 is the normal plot which shows little curvature and a discontinuity problem. A summary of the regression data is included in Appendix C.

<sup>&</sup>lt;sup>X</sup> denotes an observation whose X value gives it large influence.

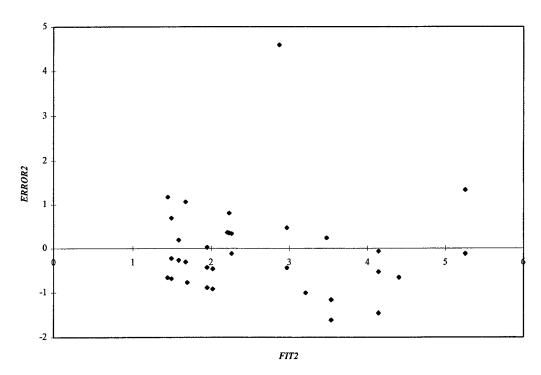


Figure 11. Residual vs Fit Plot LEVEL2 Against ACCION1 (ERROR2 vs. FIT2)

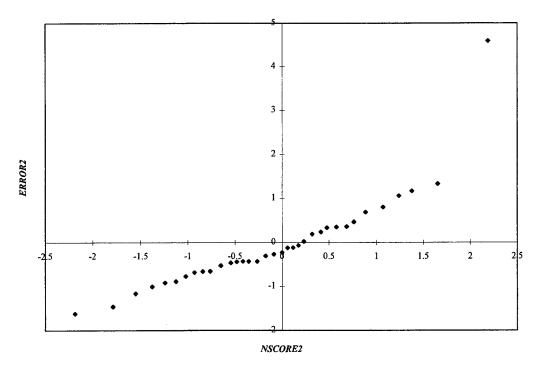


Figure 12. Normal Plot LEVEL2 Against ACCION1 (ERROR2 vs NSCORE2)

## 4. Comparing Results and Interpretations

To compare the results of the relationship between the level of corruption measured by *El Tiempo* and by *The Economist* with the anti-drug action curve developed in Chapter IV, the regression results are summarized in Table 8.

| INDICATOR        | El Tiempo (LEVELI)            | The Economist (LEVEL2)         |
|------------------|-------------------------------|--------------------------------|
| Equation         | LEVEL1 = 4.07+0.000015ACCION1 | LEVEL2 = 0.432+0.000012ACCION1 |
| Constant t-ratio | 5.32, p = 0.000               | 0.59, p = 0.558                |
| ACCIONI t-ratio  | 4.82, p = 0.000               | 3.33, p=0.002                  |
| Standard Error   | 2.882                         | 2.236                          |
| R-squared        | 28.2 percent                  | 21.3 percent                   |
| F statistics     | 23.22, p=0.000                | 11.10, p = 0.002               |
| Durbin-Watson    | 2.08, no serial correlation   | 1.40, serial correlation       |
| Lack of Fit      | No evidence of Lack of Fit    | No evidence of Lack of Fit     |

Table 8. Comparing the Regression Outputs Using the Two Sources of Data

The regression using LEVEL1 (number of articles published by El Tiempo) is a better model to represent the relationship between the "war on drugs," (action curve) and the level of official corruption in Colombia. The statistical output shows that the model using LEVEL1 is a good model to represent the relationship of the two variables. Note that with LEVEL1, all the regression assumptions are met: the variables are linearly related, t and f statistics are significant, there is no serial correlation between the error terms (Durbin-Watson is 2.08), and there is no evidence of lack-of-fit. Another strong argument in favor of the LEVEL1 relationship is that El Tiempo is a national newspaper in Colombia. Therefore, it will capture the level of official corruption more accurately. The relationship using LEVEL2 (The Economist) is weaker than LEVEL1, but is valid. Since no good correlation exists between El Tiempo and The Economist, the decision on which set of data to use becomes a judgment call. Relying on the assumption that because El Tiempo is a national newspaper and it

captures more information regarding the general level of corrupt practices in Colombia, the corruption level measured by the number of articles published by *El Tiempo* (*LEVEL1*) will be used as the primary relationship in the context of this thesis.

#### 5. Cause and Effect

Establishing the cause and effect relationship between two variables is not an easy task. Statistical packages give information on mathematical correlation but are not themselves capable of establishing which variable is the cause and which the effect. To do that, one must analyze the figures and make an interpretation based on the results and one's understanding of real world circumstances.

Was the level of official corruption in Colombia causing an increase in the effort against illegal drugs? Or was the increasing effort against illegal drugs causing official corruption in Colombia to increase?

The author's judgment is that the action against illegal drugs is probably the cause, and official corruption in Colombia is one of the effects. This judgment is supported by two approaches. The first approach is my understanding of the situation, and the second one is using analytical procedures.

First, the data used in this investigation includes all kinds of official corruption in Colombia; it was not limited to drug related corruption. It is improbable, therefore, that the Colombian government would take action against illegal drug traffic based only on the overall level of official corruption. From the discussion in Chapter II, it can be seen that Colombian anti-drug policy has been driven primarily by U.S. pressures and internal political events. The primary purpose of the war on drugs from Colombia's point of view is to reduce trafficking and gain the respect of the international community, and is not to reduce official corruption. However, the reduction of official corruption may be a secondary objective.

The second approach is using analytical procedures. If publicity about corruption, as represented by the number of newspaper articles, is what led the government to take further action, then there would likely be a lag between when the publicity occurs and when the government acts. Therefore, regressing *ACCION1* on *LEVEL1* with a lag should show a stronger relation than regressing *ACCION1* on *LEVEL1* without a lag. In fact, as Table 9

shows, the strongest relationship, as measured by the F-statistic, the t-ratios and the R-squared, occurs when *ACCION1* is regressed on *LEVEL1* with no lag. Although the relationship is stronger with a two-period lag than with a one-period lag, the strongest relationship occurs with no lag.

These two approaches led the author to conclude, that it is very likely that official corruption in Colombia is one of the effects of the war on drugs.

On the other hand, since the data is arranged in time sequence, the possibility of a lagged relationship between the original dependent variable and the explanatory variable exists.

If the correlation between the two variables is stronger after lagging the dependent variable (official corruption), the effect of the explanatory variable (Anti-Drug action curve) is delayed by the amount of the lag. If the strongest correlation is obtained without a lag, the effects are immediate.

Results of these lagged regressions, also summarized in Table 9, show that there is a slight but not significant delay for the effect to take place. The impact of the level of action against illegal drugs on official corruption in Colombia is not immediate. Although the difference in the coefficient of correlation value is not significant for the analysis (i.e. from 28.2% to 29.1% with one month lag), this fact reinforces the assumption that official corruption in Colombia is probably an effect of the level of action against illegal drugs.

#### C. SUMMARY

Chapter V, Data Analysis and Interpretation, is divided in two main sections. The first one is a brief explanation of the statistical concepts and definitions used in the analysis. The second section is the analysis itself, and it is arranged in a logical sequence to help the reader understand the process followed to obtain the results. The first step was to find the relationship between the two sets of data used to measure official corruption in Colombia (*El Tiempo* and *The Economist*). Results indicate that the two variables are not highly correlated. The next step was to establish the relationship between the Anti-Drug action curve (ACCIONI) and corruption measured by the two selected sources. (LEVEL1 and LEVEL2)

Several alternatives with the original data were considered but only the most relevant ones were included in the analysis.

| Dependent<br>Variable | Independ<br>Variable | Dependent<br>Var. Lag | R-<br>squared | Constant<br>t-ratio | Indep. Var.<br>t-ratio | F-statistics  |
|-----------------------|----------------------|-----------------------|---------------|---------------------|------------------------|---------------|
| LEVEL1                | ACCIONI              | 0                     | 28.2%         | 5.32, p=0.000       | 4.82, p=0.000          | 23.2, p=0.000 |
| LEVEL1                | ACCIONI              | 1                     | 29.1%         | 5.05, p=0.000       | 4.88, p=0.000          | 23.7, p=0.000 |
| LEVEL1                | ACCION1              | 2                     | 23.6%         | 5.16, p=0.000       | 4.20, p=0.000          | 17.6, p=0.000 |
| LEVEL1                | ACCION1              | 3                     | 19.4%         | 5.21, p=0.000       | 3.67, p=0.001          | 13.4, p=0.001 |
| ACCION1               | LEVEL1               | 0                     | 28.2%         | 2.48, p=0.016       | 4.82, p=0.000          | 23.2, p=0.000 |
| ACCION1               | LEVEL1               | 1                     | 22.6%         | 2.64, p=0.011       | 4.12, p=0.000          | 16.9, p=0.000 |
| ACCIONI               | LEVEL1               | 2                     | 26.0%         | 2.45, p=0.017       | 4.48, p=0.000          | 20.4, p=0.000 |
| ACCION1               | LEVEL1               | 3                     | 19.5%         | 2.75, p=0.008       | 3.68, p=0.001          | 13.5, p=0.00  |

**Table 9. Lagged Regression Results** 

The two final relationships: *LEVEL1* and *LEVEL2*, summarized in Table 8 were considered. *LEVEL1* is the level of corruption measured with the number of articles regarding official corruption in Colombia published by *El Tiempo* from 1990 to 1995. *LEVEL2* is the level of corruption measured with the number of articles regarding official corruption published by *The Economist* magazine from 1985 to 1995.

LEVEL1 was selected as the better model in the context of the thesis. The decision relied on its comparative statistical significance and on the assumption that having its headquarters in Santfé de Bogotá D.C., Colombia's capital, the number of articles in this subject captures more accurately the level of official corruption in Colombia.

Finally, to verify if there is a lagged relation between the two variables, a lagged regression was conducted. Results indicate that there is a slight delay for the effects to take place. Lagged regression was also conducted swapping the dependent and explanatory variables to verify if corruption measured by the number of articles on official corruption

published by *El Tiempo* causes the action against illegal drugs to increase. Results indicate that the level of official corruption is probably an effect, not a cause.

#### VI. CONCLUSIONS AND RECOMMENDATIONS

Is there a significant relationship between official corruption in Colombia and the effort to reduce illegal drug activities? The aim of this thesis is to answer this question using analytical and intuitive techniques. This chapter summaries the findings and gives final thoughts regarding anti-drug policy. This chapter also include recommendations to improve future research in this area. Before going any further, it is important to review the basic assumptions used in the thesis, which should to be kept in mind when reading this chapter.

- The analysis assumed that the number of articles regarding corruption and government officials published by the newspaper *El Tiempo* from 1990 to 1995 represent a good approximation of the level of official corruption in Colombia.
- The newspaper *El Tiempo* is unbiased regarding political issues and corrupt practices by government officials.

#### A. CONCLUSIONS

## 1. Policy Issues

Regarding policy issues, it is clear that both the United States and Colombia are engaged in the war on drugs. Each country sees the problem from a different perspective but the main objective of reducing illegal drug trafficking is shared. The fact that the United States concentrates more on supply-side solutions, and Colombia advocates demand reduction solutions is a logical consequence of the kind of problem that the illegal drug trade represents to each country.

Even though both countries have a well established anti-drug policy, the United States is more consistent in terms of goals and objectives. Colombia's anti-drug policy during the last five years has gained in consistency and continuity, but the general trend over the years has been one of reaction to external pressure and to specific internal events.

Looking at the evolution and the different circumstances tied with illegal drug activities over the last twenty years, it is obvious that the United States has exerted weighty influence on the kind of actions undertaken by the Colombian government to reduce the

problem. In most of the cases this influence is seen as an involvement in the internal affairs of the country, resulting in anti-U.S. feelings.

## 2. Findings

In Chapter V, corruption as measured by the information from *El Tiempo* was selected as the best approximation to represent official corruption in the relationship between official corruption in Colombia and the effort to reduce illegal drug trafficking, commonly called the "war on drugs."

The basic result from the data analysis is that "28.2 percent of the total variation in the level of official corruption in Colombia can be explained by changes in the level of effort in the conduct of the war on drugs," meaning that in fact there is a direct linear relationship between these two variables. We can say, based on the results, and on the assumptions, that if the level of anti-drug action increases, the level of official corruption will increase but not in the same proportion. This relationship seems to be in line with reality, and with the way individuals react to incentives. To illustrate this, consider the hypothetical case of no action against illegal drug trade. In that situation, there is no need for drug dealers to expend money and resources to buy government "protection," or bribe officials to conduct their operations. As a result, official corruption caused by this kind of activity will be minimal. Conversely, if there is some level of action against the illegal drug trade, corruption would be expected to be higher.

The result also provides an interesting insight if we look at it from a different perspective. Since official corruption in Colombia and the war on drugs are linearly related, the presence of corruption in Colombia leads to the conclusion that the government is acting against the problem.

The 28.2 percent in the coefficient of determination suggests that there are important explanatory variables missing from the model. Recall that the articles selected for the analysis are those related to official corruption in Colombia. Therefore, the data covers the whole range of corrupt practices, not only illegal-drug related. Corruption in Colombia is widespread and there are several kinds of corrupt activities. A study by *Fedesarrollo* 

(development federation) and the *Contraloria General*<sup>17</sup> in 1994 revealed that the most common corrupt practices in Colombia are: fraud, bribery, illicit contracting, and document alteration. [Ref. 21] In addition to that, Cepeda [Ref. 22] presents the results of a survey conducted on the perception of the Colombian public regarding corruption. The results are that 54 percent of the people thinks that the problem is very widespread and 28 percent that the problem is widespread. This suggests that the level of corruption in Colombia is high. The results of the analysis also leads to the following conclusion: illegal drug activities are not the only cause of official corruption in Colombia. In fact, we can say that illegal drug activities cause between twenty and forty percent of corrupt practices among government officials.

#### B. RECOMMENDATIONS

The phenomenon of corruption includes so many variables that trying to explain it completely in an individual research is almost impossible. The best contribution that researchers can make to clarify the question is to conduct a separate analysis with the intention to build a knowledge base that enables a larger perspective of corruption.

Based on the results of this research, I believe that the following topics deserve further study:

- The time frame for the articles published by *El Tiempo* (1990 to 1995) is too short. Expanding this time frame to 1975 to 1995 would give a more accurate relationship between official corruption and the war on drugs.
- Dividing the information on corruption in Colombia by corrupt practices i.e., drug-related, will provide a direct relationship between the war on drugs and the level of corruption caused by illicit drug activities.

Contraloria General is the office in charge of the supervision of all government officials while performing their jobs. They basically look for administrative problems and corrupt practices.

- A similar study but using official records regarding number of officials convicted on drug-related corrupt practices will provide a base to compare the social research technique used in this thesis to the real situation in Colombia.
- Another interesting aspect of this research would be to study to what extent the United States assistance programs are contributing to the problem. Do the assistance programs encourage corrupt practices in Colombia? Is the U.S. perspective of the war on drugs consistent with the views and beliefs of "producing" countries?

## APPENDIX A.

# Articles Regarding Official Corruption in Colombia Published by *EL TIEMPO* from August 1990 to August 1995

| Date<br>(M/D/Y) | Article Title  | Page   |
|-----------------|--|--------|
| 08/04/90        | JUECES DE ORDEN PUBLICO: DE INVESTIGADORES A INVESTIGADOS  | 1A     |
| 08/05/90        | AUN NO MEDIMOS EL PRECIO SOCIAL DE LA CORRUPCION (Violación de derechos humanos)                           | 12A    |
| 09/08/90        | LA PAZ DEL PAIS ES MI RETO HISTORICO (Narcoterrorismo y Paramilitares)                                     | 6A-7A  |
| 09/08/90        | CREAN FRENTE COMUN CONTRA LA CORRUPCION  | 1A-8A  |
| 09/10/90        | EL ALTO PRECIO DEL CONSUMO DE DROGA  | 3A     |
| 09/12/90        | CORRUPCION E INDIFERENCIA  | 4A     |
| 09/12/90        | CORRUPCION PEOR QUE GUERRILLA: PROCURADOR  | 1A-13A |
| 09/15/90        | ADUANA: SINCERIDAD Y NO MAS DOBLE MORAL  | 8A     |
| 09/20/90        | JUECES PODRIAN BUSCAR A LOS NARCOS INTERESADOS   | 14A    |
| 09/21/90        | SOBRE LA PROCURADURIA  | 4A     |
| 09/30/90        | COMO ROBAR \$1,000 MILLONES?   | 1A-8A  |
| 09/30/90        | PROCURADOR INCOMODO?   | 5A     |
| 10/04/90        | CONTRAESCAPE   | 4A     |
| 10/06/90        | GOBIERNO JUSTIFICA LA INVERSION ESTATAL EN SERVICIOS<br>"PTRIVATIZAR NO ES EL NORTE DEL GOBIERNO": GAVIRIA | 9A     |
| 10/18/90        | NUEVA ORGANIZACION A INSPECCIONES DE POLICIA "JUSTICIA CASERA, JUSTA Y PRONTA"                             | 1C     |
| 11/03/90        | DEFENSA DEL ESTADO COLOMBIANO EN ALEMANIA<br>PROCURADOR "SUPERAMOS CRISIS DEL NARCOTRAFICO"                | 9B     |
| 11/09/90        | TORRE: IMPUESTOSLIBERALES?   | 5A     |
| 11/12/90        | DICE QUE LA CRISIS SE DEBE A LA CORRUPCION. ESPINOSA<br>PROPONE REVOCATORIA DEL MANDATO                    | 7A     |

| Date<br>(M/D/Y) | Article Title   | Page  |
|-----------------|---|-------|
| 11/13/90        | A GAVIRIA SE LE DESBOCO EL CABALLO DE LA CONSTITUYENTE "SOMOS UNA ALTERNATIVA SERIA": RAMIREZ                 | 9A    |
| 11/14/90        | NO ES LA PANACEA OPINION DE LA CONSTITUYENTE  | 5A    |
| 11/18/90        | ME HE SENTIDO GOLPEADO CONTRA EL MUNDO (ALFONSO GOMEZ MENDEZ)   | 12A   |
| 11/20/90        | GAVIRIA PROPONE NUEVA CONCEPCION DE LA SEPARACION DE PODERES. MAYOR CONTROL POLITICO DEL CONGRESO AL GOBIERNO | 8A    |
| 11/23/90        | DURAS CRITICAS DEL DIRECTOR DE ADUANAS. FENALCO PIDE<br>LOS REMATES DE ADUANA                                 | 14A   |
| 11/24/90        | COMO RESPALDO AL PROCURADOR ALFONSO GOMEZ MENDEZ<br>RENUNCIA MASIVA EN LA PROCURADURIA                        | 9A    |
| 12/13/90        | PROCURADOR: CREO EN PROCESOS PACIFICOS  | 1A-8A |
| 12/22/90        | VIVIENDA POPULAR, EN MANOS DE MUNICIPIOS  | 3A    |
| 12/24/90        | "INTERPRETAMOS CON COHERENCIA LA VOLUNTAD DE LOS COLOMBIANOS": MAZA   | . 8A  |
| 02/15/91        | LOTES SE "ESFUMAN" SIN QUE SUS DUEÑOS LO SEPAN (entidades publicas se acusan)                                 | 1A    |
| 02/25/91        | LA CUEVA DEL PIRATA (deshonestidad de funcionarios claves, desorden contable)                                 | 1A    |
| 02/26/91        | EL OTRO ASALTO (la salud, una feria de escandalos)  | la    |
| 03/05/91        | PRUEBAS AL PROCURADOR   | 7A    |
| 03/07/91        | 1,800 PERSONAS INVESTIGADAS   | 1A    |
| 03/09/91        | "MORALIZACION ES NUESTRA BANDERA": LOPEZ  | 11A   |
| 03/13/91        | LOS JUECES SIN ROSTRO, ALGO ASI COMO UNA "SESION DE BRUJOS"   | 1A    |
| 03/17/91        | EL ESTADO DE LA NACION NUNCA FUE TAN MALO COMO AHORA, DICE LLERAS   | 8A    |
| 03/21/91        | GAVIRIA ASUME CAMPAÑA PARA ERRADICAR INMORALIDAD PUBLICA  | 1A    |
| 03/28/91        | CORRUPCION, ACCION EN CUATRO FRENTES  | 1A    |
| 04/09/91        | CONFISCACION A RIQUEZAS ILICITAS  | 1A    |
| 04/15/91        | ISS: TRAFICO CON PENSIONES  | 1A    |
| 04/22/91        | RADIOGRAFIA DE LA ECO-IMPUNIDAD   | 1A    |

| Date<br>(M/D/Y) | Article Title  | Page   |
|-----------------|--|--------|
| 04/24/91        | EXPROPIACION CON INDEMNIZACION PREVIA  | 1A     |
| 04/25/91        | LA CONSTITUYENTE ABRE PASO A LA ELECCION POPULAR DEL PROCURADOR                | 7A     |
| 04/25/91        | DECLARAN GUERRA A LA INMORALIDAD   | 1A     |
| 04/26/91        | A LOS CORRUPTOS HABRA QUE PROBARLES, NO BASTA SABERLO                          | 6A     |
| 04/30/91        | MURIO SOBREVIVIENTE DE ATENTADO EN CARCEL DE CALI                              | 1A     |
| 05/08/91        | LA ADUANA AUN NO ESTA LISTA PARA LA APERTURA                                   | 11B    |
| 05/15/91        | LA MORALIZACION TAMBIEN LLEGA A LAS COOPERATIVAS                               | 15A    |
| 05/18/91        | PRIVATIZAR: TRAGO DULCE O AMARGO?  | 7A     |
| 05/26/91        | SERIA GAVANTE DE LA ENTREGA DE ESCOBAR   | 1A     |
| 05/29/91        | OPERAN 15 AGENCIAS DE DENUNCIAS EN TODO EL PAIS                                | 7A     |
| 05/30/91        | NUEVAS INVESTIGACIONES POR CORRUPCION EN CAJA AGRARIA                          | 3C     |
| 06/05/91        | MILTON FRIEDMAN RESPONSABILIZA A ESTADOS UNIDOS DE NARCODEMOCRACIA EN COLOMBIA | 12A    |
| 06/15/91        | EXPROPIACION POR VIA ADMINISTRATIVA  | 7A     |
| 06/21/91        | ESCOBAR PODRIA DIRIGIR EL CARTEL DESDE LA PRISION                              | 12A    |
| 06/25/91        | COTO A CORSARIOS DE LA ADUANA  | 4B     |
| 06/28/91        | EL FALLO CONTRA "NACHO" VIVES NO CAUSA SORPRESA                                | 1A     |
| 06/29/91        | "NOS FORTALECIMOS," DICE EL PROCURADOR   | 13A    |
| 07/01/91        | JUSTICIA: TRASCENDENTALES REFORMAS EN CUATRO FRENTES                           | 1A     |
| 07/05/91        | "HA RENACIDO LA ESPERANZA": PRESIDENTE GAVIRIA (mensaje a la guerrilla)        | 1A-3A  |
| 07/14/91        | LA EMPRESA DE ENERGIA RECLAMA MAYORIA DE EDAD                                  | 21A    |
| 07/14/91        | LA TENAZA DE LA COCA   | 1B     |
| 07/29/91        | CORRUPCION? CLARO QUE SI: CAJA AGRARIA   | 1A-3A  |
| 08/07/91        | POLITICA: EL COMIENZO DE LA RUPTURA  | 1A-3A  |
| 08/12/91        | A QUIEN LE ESTORBA EL INDERENA?  | 1A-3A  |
| 08/13/91        | "ADMINISTRACION PUBLICA LLEGO A GRADO INTOLERABLE DE CORRUPCION"               | 9B     |
| 08/27/91        | ISS: PIDEN LA DESTITUCION DE 18 EMPLEADOS                                      | 1A-12A |

| Date<br>(M/D/Y) | Article Title   | Page  |
|-----------------|---|-------|
| 09/03/91        | LA CONTRALORIA PUBLICARA LISTA NEGRA DE EMPLEADOS CORRUPTOS   | 8B    |
| 09/07/91        | MILLONARIO FRAUDE EN CARTAGENA (cajanal)                      | 1A-8A |
| 09/08/91        | LA APERTURA LE LLEGO A MINOBRAS                               | 1A-4C |
| 09/11/91        | FRAUDE MASIVO AL TESORO DEL ESTADO                            | 1A-8A |
| 09/14/91        | DIPLOMATICOS RESPONDEN DENUNCIAS DEL CONTRALOR                | 15A   |
| 09/14/91        | SALEN DOS JUECES POR CORRUPCION                               | 1A-8A |
| 09/26/91        | VIGENTE LA LEY ANTITERRORISTA                                 | 1A-8A |
| 09/27/91        | ANTITERRORISMO, NOTA AL CONGRESO                              | 3A    |
| 09/28/91        | DESCUBREN MILLONARIOS FRAUDES EN LA ENERGIA Y LA TESORERIA    | 1A-7B |
| 09/28/91        | RETIENEN DEVOLUCION DE INPUESTOS POR FRAUDE                   | 1A-7B |
| 09/29/91        | ADICION PRESUPUESTAL PARA ENRIQUECER A UN ABOGADO             | 16A   |
| 10/02/91        | GASOLINA: ALZA MAYOR QUE INFLACION                            | 7C    |
| 10/02/91        | NO HAY DINERO PARA PAGAR A LOS PENSIONADOS DEL ISS            | 1A-8A |
| 10/08/91        | ESCOBAR, JUICIO POR TERRORISMO                                | 1A-7B |
| 10/16/91        | EL GOLFO: UN PROBLEMA DE OPINION                              | 1A-3A |
| 10/16/91        | HAY FALTANTE DE \$8,776 MILLONES: CONTRALOR                   | 11C   |
| 10/20/91        | INSEGURIDAD, EL MAL PARA ATACAR EN BOGOTA: SAULO ARBOLEDA     | 10A   |
| 10/24/91        | PROCURADURIA: 269 DENUNCIAS POR PARTICIPACION EN POLITICA     | 9C    |
| 11/03/91        | PROCESO DE PAZ: HAY INTERESES INTERNACIONALES                 | 1A-7A |
| 11/08/91        | SAQUEARON EL MINOBRAS (procuraduría encontró irregularidades) | 1A-8A |
| 11/09/91        | "MINISTERIO NO HA SIDO SAQUEADO": MINOBRAS                    | 5B    |
| 11/11/91        | EL PRIMERO DE FEBRERO DEL 92 SE REANUDA EL PROCESO DE PAZ     | 6A    |
| 12/20/91        | O HAY REAJUSTES EN TARIFAS O HAY GRAVE CAOS FINANCIERO        | 1A-8A |
| 01/09/92        | FRENAR LA CORRUPCION EN LA ADMINISTRACION                     | 1C    |
| 01/19/92        | NO HABRA MEDIACION EXTERNA EN PROCESO DE PAZ: GAVIRIA         | 8A    |

| Date<br>(M/D/Y) | Article Title   | Page     |
|-----------------|---|----------|
| 01/26/91        | SENADO: ANDA "PATAS ARRIBA"   | 1A-7A    |
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| 07/20/94        | EL GENERAL GIL UN GUERRERO                       | 3A       |
| 07/29/94        | ESTADO, LISTO PARA EL SAQUEO: VEEDOR             | 8A       |
| 08/02/94        | EL SENADO ELIGE HOY PROCURADOR                   | 1A-3A    |
| 08/02/94        | QUE ES Y QUE TIENE LA PROCURADURIA               | 3A       |
| 08/03/94        | VASQUEZ EL NUEVO PROCURADOR                      | 1A-9A    |
| 08/05/94        | AERONAUTICA. "HAY FALLAS DE SEGURIDAD"           | 1A-8A    |
| 08/07/94        | UN ARRANQUE TRANSPARENTE                         | 9A       |
| 08/07/94        | PODRIA COLOMBIA LIBRARSE DE NARCOS?              | 9A       |
| 08/14/94        | NO MAS PELEAS EN LA JUSTICIA                     | 1A-18A   |
| 08/15/94        | INVESTIGACION. EXTRAÑA OLA DE ASESINATOS EN CALI | 12A      |
| 08/21/94        | CARTEL DE CALI, UN CALLEJON SIN SALIDA?          | 1A-26A   |

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| 08/26/94        | FISCALIA RASTREA FESTIN DE AUXILIOS                             | 15A    |
| 08/27/94        | SE DESCENTRALIZA LA CORRUPCION AFIRMA LA CONTRALORIA            | 1B     |
| 09/04/94        | CUERPO DE CHOQUE ANTICORRUPTOS                                  | 9A     |
| 09/21/94        | LOS CARTELES SIGUEN ALZANDO VUELO                               | 1A-15A |
| 09/23/94        | REORGANIZACION FISCALIA POR PRIORIDADES ANTICRIMEN              | 1A     |
| 10/01/94        | DIRECTORIO NACIONAL CONSERVADOR REVISARIA RELACIONES CON SAMPER | 8A     |
| 10/02/94        | DEA CON RABO DE PAJA  | 1A-24A |
| 10/09/94        | EL ESTADO PATROCINARA LAS INVESTIGACIONES CIUDADANAS            | 10A    |
| 10/13/94        | GERENTES TAMBIEN SE QUEDAN CON LOS RECURSOS DEL ESTADO          | 11B    |
| 10/16/94        | LA CORRUPCION NO ES SOLO DEL CONGRESO                           | 11A    |
| 10/17/94        | NARCONGRESISTAS Y CORRUPCION                                    | 5A     |
| 10/21/94        | DLN PEDIRA 30 EXPULSIONES                                       | 1A-6A  |
| 10/24/94        | ATLANTICO (desconoce su auténtica vocación económica)           | 9A     |
| 10/25/94        | LA MODERNIZACION HA LOGRADO FRENAR LA CORRUPCION                | 10C    |
| 10/30/94        | "EXAMINEN LOS HECHOS MAS QUE LOS CHISMES"                       | 24A    |
| 11/06/94        | AHORA QUE SE ATENGAN TODOS LOS CORRUPTOS                        | 2B     |
| 11/09/94        | LOS DOCE PUNTOS DE NEGOCIACION DEL ELN                          | 1A-15A |
| 11/12/94        | SUBSIDIOS: POLITICA TRAIDA DE LOS CABELLOS                      | 8E     |
| 11/22/94        | EL CONGRESO: 12 DIAS CONTRA EL RELOJ                            | 6A     |
| 11/24/94        | OFENSIVA CONTRA NARCOLEY  | 1A-2A  |
| 12/01/94        | AGRABAN CASTIGO PARA QUIEN ROBE AL FISCO                        | 6A     |
| 12/05/94        | LE LLEGA COMPAÑIA A LA TUTELA                                   | 3A     |
| 12/07/94        | "SOY UN GUERRERO DEL NARCOTRAFICO": SERRANO                     | 16A    |
| 12/09/94        | EN APUROS 1,205 EMPLEADOS PUBLICOS                              | 3A     |
| 12/12/94        | CONTRATOS PUBLICOS  | 4A     |
| 12/17/94        | CON BUEN BALANCE CERRO EL CONGRESO                              | 1A-6A  |
| 12/29/94        | "ESTOY BUSCANDO AGENDA PROPIA": (De La Calle)                   | 1A-6A  |

| Date<br>(M/D/Y) | Article Title   | Page        |
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| 12/30/94        | MARIA IZQUIERDO SIGUE EN LA HOGUERA   | 1A-18A      |
| 01/02/95        | ALCALDES LE APUESTAN AL PACTO SOCIAL  | 7A          |
| 01/03/95        | EL CIUDADANO PUEDE RONDAR A SU ALCALDE  | 1A-3A       |
| 01/04/95        | DROGAS, UNA GUERRA PERDIDA?   | 1A-3A       |
| 01/07/95        | AUMENTO LA CORRUPCION   | 9A          |
| 01/12/95        | LEY PARA CAZAR FORTUNAS ILICITAS  | 1A-14A      |
| 10/18/95        | FRACASO EN LUCHA ANTISECUESTRO  | 1A-13A      |
| 01/21/95        | EN TELA DE JUICIO DENUNCIAS CONTRA AEROVIVIL                                  | 6A          |
| 01/21/95        | RECUPERAR LA FE EN LA JUSTICIA  | 5A-20A      |
| 01/21/95        | MARIO GONZALEZ VARGAS, SUPER JUEZ DE LA POLITICA                              | 10A         |
| 01/22/95        | LUCHA ANTICORRPCION NO ADMITE NEGLIGENCIA                                     | 20A         |
| 02/01/95        | RECHAZAN CARCEL EN GORGONA  | 3A          |
| 02/03/95        | NUEVOS SOPORTES PARA LUCHA ANTICORRUPCION                                     | 6A          |
| 02/05/95        | NARCOS, AHORA AL PARAISO?   | 24A-25A     |
| 02/05/95        | POR CARTA Y POR TELEFONO SE LUCHARA CONTRA LA CORRUPCION                      | 1A          |
| 02/07/95        | LA CONTRALORIA PUBLICA LISTA NEGRA DE CORRUPTOS                               | 1A-1B       |
| 02/08/95        | APAGAN MORAL  | 4A-9A       |
| 02/26/95        | LA MUERTE ANDA A MIL  | 6A          |
| 02/26/95        | MAS TRANSPARENCIA EN CONTRATOS DE FF.AA.                                      | 18A         |
| 02/26/95        | "EXITO LIMITADO DE COLOMBIA EN LUCHA CONTRA LAS DROGAS"                       | 8A          |
| 03/08/95        | LA CAIDA DEL DOLAR AMENAZA CON UNA CRISIS MUNDIAL EN LOS MERCADOS FINANCIEROS | 3B          |
| 03/12/95        | LUCHA CONTRA LA CORRUPCION, DEBATE SUPERFICIAL?                               | 2B          |
| 03/15/95        | PROPONEN JUICIO POLITICO A NARCOS   | 1A-8A       |
| 03/21/95        | AL CONGRESO, NUEVO ESTATUTO DEL MINISTERIO PUBLICO                            | 8A          |
| 03/21/95        | ACUERDAN CACERIA DE CORRUPTOS   | 13 Judicial |
| 03/22/95        | CAPTURA DE OTRO NARCO DE CALI ES FUNDAMENTAL                                  | 6A          |
| 03/24/95        | POLICIA DEPURA NIVEL DE OFICIALES   | 1A-3A       |

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| 03/25/95        | REESTRUCTURAN FISCOS REGIONALES  | 6A     |
| 03/28/95        | MAGISTERIO DE CASANARE ENTRA EN CESE AL FUEGO  | 4A     |
| 04/02/95        | ALCALDES, PRESOS DEL MIEDO   | 6A     |
| 04/03/95        | DEFIENDEN INSTRUMENTOS CONTRA LA CORRUPCION  | 18A    |
| 04/07/95        | NARCOTRAFICO, SOLO UN ASPECTO DE LAS RELACIONES  | 8A     |
| 04/09/95        | MONTAJES, FOTOMONTAJES, MINISTROS Y DELFINES   | 3A     |
| 04/09/05        | POR QUE TE ODIO, TE DENUNCIO (funcionarios sancionados, sector gobierno y fiscalizadores)  | 1A-13A |
| 04/17/95        | EL PAIS NO SEGUIRA CON BALANCES "CHIMBOS": NIETO   | 7A     |
| 04/18/95        | PLIEGO DE CONDICIONES A COLOMBIA   | 3A     |
| 04/22/95        | TRAMITES DE TRANSITO   | 1E-2E  |
| 04/22/95        | FUNCIONARIOS TIENEN QUE PAGAR POR SUS EQUIVOCACIONES   | 8B     |
| 04/25/95        | DECLARACION DE GIRALDO   | 1A-3A  |
| 04/30/95        | "NO ESTAN TODOS LOS QUE SON": GARCIA HURTADO   | 17A    |
| 05/02/95        | EL PADRE GALLO SE CONFIESA (narcotrafico, corrupción rn la política)   | 3A     |
| 05/05/95        | CREAN GRUPO ELITE CONTRA LA CORRUPCION (se unen contraloría, fiscalía y procuraduría)  | 1A     |
| 05/09/95        | SAMPER CONSULTARA CON PARTIDOS CAMARA UNICA  | 11A    |
| 05/10/95        | A UN PASO, PROYECTO DE LEY ANTICORRUPCION  | 1A     |
| 05/10/95        | HABRA PROGRAMA DE DEPURACION EN FF.MM.   | 7B     |
| 05/23/95        | PREPARAN INVENTARIO DEL ESTADO   | 3B     |
| 05/25/95        | EN SUSPENSO LEY ANTICORRUPCION   | 9A     |
| 05/29/95        | BANCO MUNDIAL CRITICA OBRAS PUBLICAS   | 1A-1C  |
| 05/30/95        | NO SE HIZO UNA ADUANA PARA ANGELES   | 4B     |
| 05/31/95        | TERMINO "PARTO" DE LEY ANTICORRUPCION  | 8A     |
| 05/31/95        | SIN RESERVAS, PASO LA LEY ANTICORRUPCION   | 1A     |
| 06/03/95        | LA SOCIEDAD INTERAMERICANA DE PRENSA CENSURA "MICO"<br>CONTRA PRENSA NACIONAL  | 6A     |
| 06/05/95        | SHHH! (Pretenden combatir la corrupción silenciando a la prensa, a la televisión, a la radio o limitandoles su actividad. Es un contrasentido) | 5A     |

| Date<br>(M/D/Y) | Article Title                                       | Page  |
|-----------------|---|-------|
| 06/07/95        | SE INICIA OFENSIVA CONTRA "LAVADORES"               | 8A    |
| 06/08/95        | NUEVAS ARMAS PARA COMBATIR LA CORRUPCION            | 7A    |
| 06/10/95        | CARCELES CONDENADAS                                 | 4A    |
| 06/13/95        | TRAMITES INCULTOS                                   | 1D    |
| 06/15/95        | TRANSITO Y SANCIONES                                | 4A    |
| 06/17/95        | NARCODEMOCRACIA?                                    | 5A    |
| 06/18/95        | EL TERRORISMO NO LOGRO PARALIZAR AL CONGRESO        | 8A    |
| 06/20/95        | FARC SE ATRIBUTE PLAGIO DE RODRIGO TURBAY COTE      | 7A    |
| 06/28/95        | DE CAPATAZ A SEMI-ZAR DE LA COCA                    | 9A    |
| 06/30/95        | EL GOBIERNO NACINAL CAYO EN SU PROPIA RED           | 6A    |
| 07/02/95        | LA CEDULA, DOCUMENTO VULNERABLE                     | 1A    |
| 07/03/95        | PASOS CONTRA LA CORRUPCION                          | 7A    |
| 07/05/95        | QUIEN TIENE EN LA MIRA A LOS PERSONEROS TOLIMENSES? | 4A-6A |
| 07/07/95        | RECHAZO A REFORMAS: DE LA CALLE                     | 1A    |
| 07/09/95        | EL DIABLO HARA HOSTIAS? (Narcotraficantes)          | 5B    |
| 07/14/95        | "NO MAS JUEGO A LOS NARCOS": SERRANO                | 20A   |
| 07/15/95        | LA CORRUPCION, OTRO CARTEL                          | 5A    |
| 07/19/95        | LOS DELITOS SEXUALES Y SUS PENAS                    | 5A    |
| 07/22/95        | TURBAY: "NO ASPIRO A LA PRESIDENCIA"                | 6A    |
| 07/24/95        | LA OLA DE CORRUPCION                                | 5A    |
| 07/24/95        | RESPALDO A LA POLITICA DE DEPURACION EN LA POLITICA | 16A   |
| 07/27/95        | DERECHO AL HUECO                                    | 4A    |
| 07/31/95        | UN "WATERGATE" A LA COLOMBIANA?                     | 6B    |
| 08/06/95        | LA ETICA POR LOS SUELDOS                            | 4A    |
| 08/06/95        | CRONOLOGIA DE UNA HISTORIA NO ACLARADA              | 8A    |
| 08/09/95        | CAERA SAMPER?                                       | 1A    |
| 08/11/95        | NO CEDE LA CORRUPCION EN EL PAIS                    | 3A    |
| 08/13/95        | ABUSO SEXUAL, MUCHO MAS QUE UN ASUNTO PENAL         | 2B    |

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| 08/15/95        | NAVARRO PIDE ANULAR ELECCIONES  | 8A   |
| 08/18/95        | IGLESIA PIDE COMPAS DE ESPERA PARA SAMPER (ruega a la guerrilla que cese violencia) | 6A   |
| 08/19/95        | "NO EXTRADICION, UN ERROR": FISCAL  | 1A   |
| 08/25/95        | TAMBALEA CENSURA A INVESTIGACIONES (procuraduría)                                   | 15A  |

## APPENDIX B.

Summary of the data and output from the regression between corruption, measured by the number of articles on official corruption published by Colombia's newspaper *El Tiempo* (LEVEL1), and action against illegal drug trafficking (ACCION1).

The following is the definition of terms:

LEVEL1 Number of articles on corruption published by *El Tiempo*.

COMMIT Level of commitment to act against the problem.

POLBUD National Police budget in millions of pesos (constant 1995 pesos).

ACCION1 Anti-Drug action curve.

ERROR1 Error terms in the regression.

FIT1 Regression Fit.

N.SCORE1 Normal Scores for the error terms.

| DATE   | LEVEL1 | COMMIT | POLBUD | ACCION1  | ERROR1   | FIT1     | N.Score1 |
|--------|--------|--------|--------|----------|----------|----------|----------|
| Aug-90 | 2      | 0.2    | 408711 | 81742.22 | -1.17852 | 5.333638 | -1.23567 |
| Sep-90 | 10     | 0.2    | 408711 | 81742.22 | 1.64967  | 5.333638 | 1.720872 |
| Oct-90 | 3      | 0.2    | 408711 | 81742.22 | -0.825   | 5.333638 | -0.84685 |
| Nov-90 | 9      | 0.2    | 408711 | 81742.22 | 1.296146 | 5.333638 | 1.329401 |
| Dec-90 | 3      | 0.2    | 408711 | 81742.22 | -0.825   | 5.333638 | -0.84685 |
| Jan-91 | 0      | 0.2    | 427667 | 85533.42 | -1.90513 | 5.392271 | -1.72087 |
| Feb-91 | 3      | 0.2    | 427667 | 85533.42 | -0.84521 | 5.392271 | -0.93863 |
| Mar-91 | 7      | 0.2    | 427667 | 85533.42 | 0.568024 | 5.392271 | 0.734669 |
| Apr-91 | 8      | 0.2    | 427667 | 85533.42 | 0.921333 | 5.392271 | 1.075191 |
| May-91 | 6      | 0.2    | 427667 | 85533.42 | 0.214716 | 5.392271 | 0.184397 |
| Jun-91 | 6      | 0.2    | 427667 | 85533.42 | 0.214716 | 5.392271 | 0.184397 |
| Jul-91 | 5      | 0.2    | 427667 | 85533.42 | -0.13859 | 5.392271 | -0.08157 |
| Aug-91 | 4      | 0.2    | 427667 | 85533.42 | -0.4919  | 5.392271 | -0.58201 |
| Sep-91 | 11     | 0.2    | 427667 | 85533.42 | 1.981258 | 5.392271 | 1.937581 |
| Oct-91 | 7      | 0.2    | 427667 | 85533.42 | 0.568024 | 5.392271 | 0.734669 |
| Nov-91 | 4      | 0.2    | 427667 | 85533.42 | -0.4919  | 5.392271 | -0.58201 |
| Dec-91 | 1      | 0.2    | 427667 | 85533.42 | -1.55183 | 5.392271 | -1.5631  |
| Jan-92 | 5      | 0.2    | 500479 | 100095.7 | -0.21769 | 5.617482 | -0.12253 |
| Feb-92 | 7      | 0.2    | 500479 | 100095.8 | 0.487399 | 5.617484 | 0.631201 |

| DATE             | LEVEL1        | COMMIT | POLBUD           | ACCION1              | ERROR1               | FIT1                 | N.Score1             |
|------------------|---------------|--------|------------------|----------------------|----------------------|----------------------|----------------------|
| Mar-92           | EVELI<br>8    | 0.2    | 500479           | 100095.8             | 0.839945             |                      | 0.971056             |
|                  | 3             | 0.2    | 500479           | 100095.8             |                      | 5.617484             |                      |
| Apr-92           | 8             | 0.2    | 500479           |                      | -0.92278             | 5.617484             | -1.00455             |
| May-92           | 7             | 0.2    |                  | 100095.8             | 0.839945             | 5.617484             | 0.971056             |
| Jun-92<br>Jul-92 | 6             | 0.2    | 500479           | 100095.8             | 0.487399             | 5.617484             | 0.631201             |
|                  | 9             | 0.5    | 500479<br>500479 | 250239.5             | -0.67942             | 7.939511             | -0.70809             |
| Aug-92<br>Sep-92 | 9             | 0.5    | 500479           | 250239.5             | 0.371493<br>0.371493 | 7.939511             | 0.44212<br>0.44212   |
| Oct-92           | 11            | 0.5    | 500479           | 250239.5<br>250239.5 | 1.072099             | 7.939511<br>7.939511 |                      |
| Nov-92           | 12            | 0.5    |                  |                      | 1.422402             | 7.939511             | 1.235666<br>1.563103 |
|                  | 8             | 0.5    | 500479           | 250239.5             |                      |                      |                      |
| Dec-92           | 9             | 0.5    | 500479           | 250239.5             | 0.021189             | 7.939511             | 0                    |
| Jan-93           | 3             |        | 597529           | 298764.5             | 0.109047             | 8.689968             | 0.081573             |
| Feb-93           | <i>3</i><br>9 | 0.5    | 597529           | 298764.5             | -2.00132             | 8.689968             | -1.93758             |
| Mar-93           |               | 0.5    | 597529           | 298764.5             | 0.109047             | 8.689968             | 0.081573             |
| Apr-93           | 10            | 0.5    | 597529           | 298764.5             | 0.460775             | 8.689968             | 0.534215             |
| May-93           | 8             | 0.5    | 597529           | 298764.5             | -0.24268             | 8.689968             | -0.1844              |
| Jun-93           | 9             | 0.5    | 597529           | 298764.5             | 0.109047             | 8.689968             | 0.081573             |
| Jul-93           | 10            | 0.5    | 597529           | 298764.5             | 0.460775             | 8.689968             | 0.534215             |
| Aug-93           | 19            | 0.5    | 597529           | 298764.5             | 3.626332             | 8.689968             | 2.318851             |
| Sep-93           | 5             | 0.5    | 597529           | 298764.5             | -1.29787             | 8.689968             | -1.3294              |
| Oct-93           | 6             | 0.5    | 597529           | 298764.5             | -0.94614             | 8.689968             | -1.07519             |
| Nov-93           | 7             | 0.5    | 597529           | 298764.5             | -0.59441             | 8.689968             | -0.65639             |
| Dec-93           | 8             | 0.5    | 597529           | 298764.5             | -0.24268             | 8.689968             | -0.1844              |
| Jan-94           | 5             | 0.2    | 639882           | 127976.4             | -0.36846             | 6.048667             | -0.33208             |
| Feb-94           | 4             | 0.2    | 639882           | 127976.4             | -0.71982             | 6.048667             | -0.76179             |
| Mar-94           | 5             | 0.2    | 639882           | 127976.4             | -0.36846             | 6.048667             | -0.33208             |
| Apr-94           | 7             | 0.2    | 639882           | 127976.4             | 0.334262             | 6.048667             | 0.332082             |
| May-94           | 5             | 0.2    | 639882           | 127976.4             | -0.36846             | 6.048667             | -0.33208             |
| Jun-94           | 3             | 0.2    | 639882           | 127976.4             | -1.07118             | 6.048667             | -1.1517              |
| Jul-94           | 10            | 0.2    | 639882           | 127976.4             | 1.388346             | 6.048667             | 1.436513             |
| Aug-94           | 11            | 0.5    | 639882           | 319941               | 0.699216             | 9.01747              | 0.87661              |
| Sep-94           | 3             | 0.5    | 639882           | 319941               | -2.1223              | 9.01747              | -2.31885             |
| Oct-94           | 10            | 0.5    | 639882           | 319941               | 0.346527             | 9.01747              | 0.375528             |
| Nov-94           | 5             | 0.5    | 639882           | 319941               | -1.41692             | 9.01747              | -1.43651             |
| Dec-94           | 8             | 0.5    | 639882           | 319941               | -0.35885             | 9.01747              | -0.24699             |
| Jan-95           | 10            | 0.5    | 776238           | 388119               | -0.02568             | 10.07187             | -0.04075             |
| Feb-95           | 9             | 0.5    | 776238           | 388119               | -0.38293             | 10.07187             | -0.46476             |
| Mar-95           | 9             | 0.5    | 776238           | 388119               | -0.38293             | 10.07187             | -0.46476             |
| Apr-95           | 11            | 0.5    | 776238           | 388119               | 0.331582             | 10.07187             | 0.268071             |
| May-95           | 11            | 0.5    | 776238           | 388119               | 0.331582             | 10.07187             | 0.268071             |
| Jun-95           | 12            | 0.5    | 776238           | 388119               | 0.688839             | 10.07187             | 0.817831             |
| Jul-95           | 13            | 0.5    | 776238           | 388119               | 1.046097             | 10.07187             | 1.151702             |

DATE LEVEL1 COMMIT POLBUD ACCION1 ERROR1 FIT1 N.Score1 Aug-95 9 0.5 776238 388119 -0.38293 10.07187 -0.46476

## APPENDIX C.

Summary of the data and output from the regression between corruption, measured by the number of articles on official corruption published by *The Economist* (LEVEL2), and action against illegal drug trafficking (ACCION1).

The following is the definition of terms:

LEVEL2 Number of articles on corruption published by *The Economist*.

POLBUD National Police budget in million of pesos (constant 1995 pesos).

COMMIT Level of commitment to act against the problem.

ACCION1 Anti-Drug action curve.

ERROR2 Error terms in the regression.

FIT2 Regression Fit.

N.SCORE2 Normal Scores for the error terms.

| QUARTER | YEAR | LEVEL2 | POLBUD | COMMIT | ACCION1  | ERROR2   | FIT2     | N.Score2 |
|---------|------|--------|--------|--------|----------|----------|----------|----------|
| 1st     | 1985 | 1      | 407609 | 0.3    | 122282.7 | -0.43183 | 1.950769 | -0.35359 |
| 2nd     |      | 2      | 407609 | 0.3    | 122282.7 | 0.02236  | 1.95077  | 0.232926 |
| 3rd     |      | 0      | 407609 | 0.3    | 122282.7 | -0.88602 | 1.95077  | -1.12486 |
| 4th     |      | 1      | 407609 | 0.3    | 122282.7 | -0.43183 | 1.95077  | -0.41585 |
| 1st     | 1986 | 1      | 407505 | 0.3    | 122251.5 | -0.43166 | 1.950383 | -0.2627  |
| 2nd     |      | 1      | 407505 | 0.3    | 122251.5 | -0.43166 | 1.950383 | -0.2627  |
| 3rd     |      | 0      | 407505 | 0.25   | 101876.3 | -0.77364 | 1.697252 | -1.02122 |
| 4th     |      | 0      | 407505 | 0.2    | 81501    | -0.66144 | 1.444122 | -0.8416  |
| 1st     | 1987 | 1      | 465074 | 0.2    | 93014.8  | -0.26816 | 1.587163 | -0.08665 |
| 2nd     |      | 1      | 465074 | 0.2    | 93014.8  | -0.26816 | 1.587163 | -0.08665 |
| 3rd     |      | 2      | 465074 | 0.2    | 93014.8  | 0.188545 | 1.587163 | 0.323    |
| 4th     |      | 2      | 465074 | 0.2    | 93014.8  | 0.188545 | 1.587163 | 0.323    |
| 1st     | 1988 | 3      | 482868 | 0.3    | 144860.4 | 0.348265 | 2.231262 | 0.579769 |
| 2nd     |      | 4      | 482868 | 0.3    | 144860.4 | 0.801299 | 2.231262 | 1.071593 |
| 3rd     |      | 4      | 482868 | 0.3    | 144860.4 | 0.801299 | 2.231262 | 1.071593 |
| 4th     |      | 3      | 482868 | 0.3    | 144860.4 | 0.348265 | 2.231262 | 0.579769 |
| 1st     | 1989 | 2      | 491197 | 0.3    | 147359.1 | -0.11881 | 2.262305 | 0.115655 |
| 2nd     |      | 3      | 491197 | 0.3    | 147359.1 | 0.334137 | 2.262305 | 0.479805 |
| 3rd     |      | 13     | 491197 | 0.4    | 196478.8 | 4.586485 | 2.872539 | 2.186899 |

| QUARTER | YEAR | LEVEL2 | POLBUD | COMMIT | ACCION1  | ERROR2   | FIT2     | N.Score2 |
|---------|------|--------|--------|--------|----------|----------|----------|----------|
| 4th     |      | 4      | 491197 | 0.5    | 245598.5 | 0.235831 | 3.482774 | 0.415851 |
| 1st     | 1990 | 4      | 408711 | 0.5    | 204355.5 | 0.466571 | 2.970395 | 0.761474 |
| 2nd     |      | 2      | 408711 | 0.5    | 204355.5 | -0.43974 | 2.970395 | -0.47981 |
| 3rd     |      | 3      | 408711 | 0.35   | 143048.8 | 0.358515 | 2.208756 | 0.686043 |
| 4th     |      | 4      | 408711 | 0.2    | 81742.2  | 1.169198 | 1.447119 | 1.380058 |
| 1st     | 1991 | 3      | 427667 | 0.2    | 85533.4  | 0.688954 | 1.494218 | 0.883779 |
| 2nd     |      | 1      | 427667 | 0.2    | 85533.4  | -0.22612 | 1.494218 | 0        |
| 3rd     |      | 3      | 427667 | 0.2    | 85533.4  | 0.688954 | 1.494218 | 0.883779 |
| 4th     |      | 0      | 427667 | 0.2    | 85533.4  | -0.68366 | 1.494218 | -0.92762 |
| 1st     | 1992 | 1      | 500478 | 0.2    | 100095.6 | -0.30785 | 1.67513  | -0.17398 |
| 2nd     |      | 4      | 500478 | 0.2    | 100095.6 | 1.060119 | 1.67513  | 1.242335 |
| 3rd     |      | 1      | 500478 | 0.5    | 250239   | -1.15948 | 3.540425 | -1.55033 |
| 4th     |      | 0      | 500478 | 0.5    | 250239   | -1.61589 | 3.540425 | -2.1869  |
| 1st     | 1993 | 3      | 597529 | 0.5    | 298764.5 | -0.52941 | 4.143277 | -0.64979 |
| 2nd     |      | 1      | 597529 | 0.5    | 298764.5 | -1.45554 | 4.143277 | -1.78231 |
| 3rd     |      | 3      | 597529 | 0.5    | 298764.5 | -0.52941 | 4.143277 | -0.64979 |
| 4th     |      | 4      | 597529 | 0.5    | 298764.5 | -0.06635 | 4.143277 | 0.173983 |
| 1st     | 1994 | 0      | 639882 | 0.2    | 127976.4 | -0.91743 | 2.021505 | -1.24233 |
| 2nd     |      | 1      | 639882 | 0.2    | 127976.4 | -0.4636  | 2.021505 | -0.54584 |
| 3rd     |      | 1      | 639882 | 0.35   | 223958.7 | -1.00557 | 3.213933 | -1.38006 |
| 4th     |      | 3      | 639882 | 0.5    | 319941   | -0.65692 | 4.406362 | -0.76147 |
| 1st     | 1995 | 5      | 776238 | 0.5    | 388119   | -0.12305 | 5.253366 | 0.057728 |
| 2nd     |      | 8      | 776238 | 0.5    | 388119   | 1.333884 | 5.253366 | 1.655358 |
| 3rd     |      | 8      | 776238 | 0.5    | 388119   | 1.333884 | 5.253366 | 1.655358 |

## REFERENCES

- 1. Hanratty Dennis M. and Sandra W. Meditz, eds., *Colombia, a Country Study*. Washington D.C., Federal Research Division. Library of Congress, 1990.
- 2. Bagley Bruce M., "Colombia and the War on Drugs." *Foreign Affairs*, Vol. 67 No. 4, Fall 1988.
- 3. Craig, Richard B., "Colombian Narcotics and U.S.-Colombian Relations." *Journal of Interamerican Studies and World Affairs*, Vol. 23 No. 3, August 1981.
- 4. Bagley, Bruce M., "After San Antonio." *Journal of Interamerican Studies and World Affairs*, Vol. 34, No. 3, Fall 1992.
- 5. Perl, Rahpael F., "United States International Drug Policy. Recent Developments and Issues." *Journal of Interamerican Studies and World Affairs*, Vol. 32, No. 4, Winter 1990.
- 6. Perl, Rahpael F., "Clinton's Foreign Drug Policy." *Journal of Interamerican Studies and World Affairs*, Vol. 35, No. 4, Winter 1993-94.
- 7. U.S. General Accounting Office, Drug Control in South America Having Limited Success Some Progress but Problems Are Formidable. Washington, D.C. GPO, 1978.
- 8. Samper Pizano, E., "Marijuana y la Propuesta de su Legalizacion," Editorial, *Bogotá: ANIF Fondo*, 1980, pp. 19-34.
- 9. Clear and Present Dangers: the U.S. Military and the War on Drugs in the Andes, Washington Office on Latin America, 1991.
- 10. Scott James C., *Comparative Political Corruption*, Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1972.
- 11. The White House, National Drug Control Strategy September, 1989.
- 12. The White House, National Drug Control Strategy Budget Summary, Feb 1994.
- 13. Internet Corruption Ranking Home Page. (http://www.gwdg.de/uwvw/icr.htm)
- 14. Ackerman, Susan Rose, *Corruption, a Study in Political Economy*. Academic Press, 1978.

- 15. Lee, Rensselaer W. III, *The White Labyrinth, Cocaine and Political Power*, New Brunswick, New Jersey: Transaction Publishers, 1990.
- 16. Craig, Richard B. "Illicit Drug Traffic: Implications for South American Source Countries." *Journal of Interamerican Studies and World Affairs*, Vol. 29, No. 2, Summer 1987.
- 17. Castillo, Fabio, Los Jinetes de la Cocaina. Editorial, Bogotá: Documentos Periodisticos, 1987.
- 18. "Fighting the Cocaine Wars," Time, Feb 25, 1985, p. 30.
- 19. Ministerio de Defensa Nacional. *La Fuerza Publica en cifras*. Boletin Nr. 2, April 1995.
- 20. Liao, Shu S., "Unpublished manuscript on Statistics and Decision Making," Naval Postgraduate School. 1995.
- 21. Fedesarrollo and Contraloría General. "Study on Corrupt Practices in Colombia," 1994.
- 22. Cepeda Ulloa, Fernando, *La Corrupción Administrativa en Colombia*. TM Editores, July 1994.

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